

# BUSINESS WEEK

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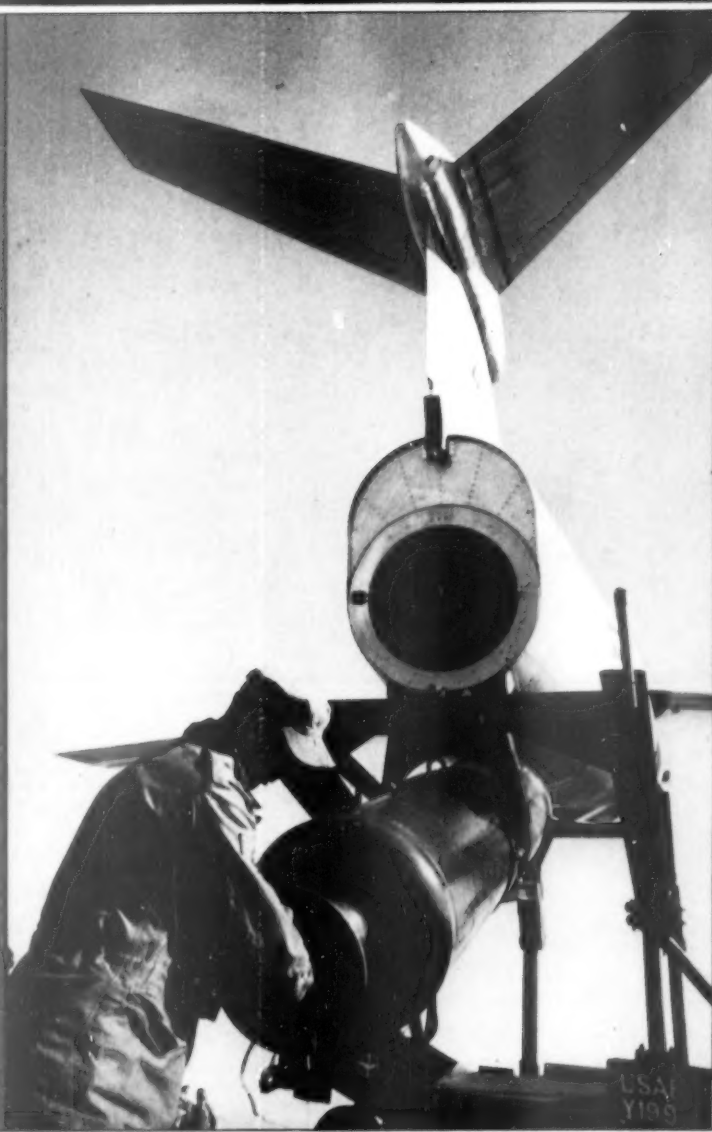


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YEAR  
AGO

## GUIDED MISSILES:

The  
Next  
Decisive  
Weapon

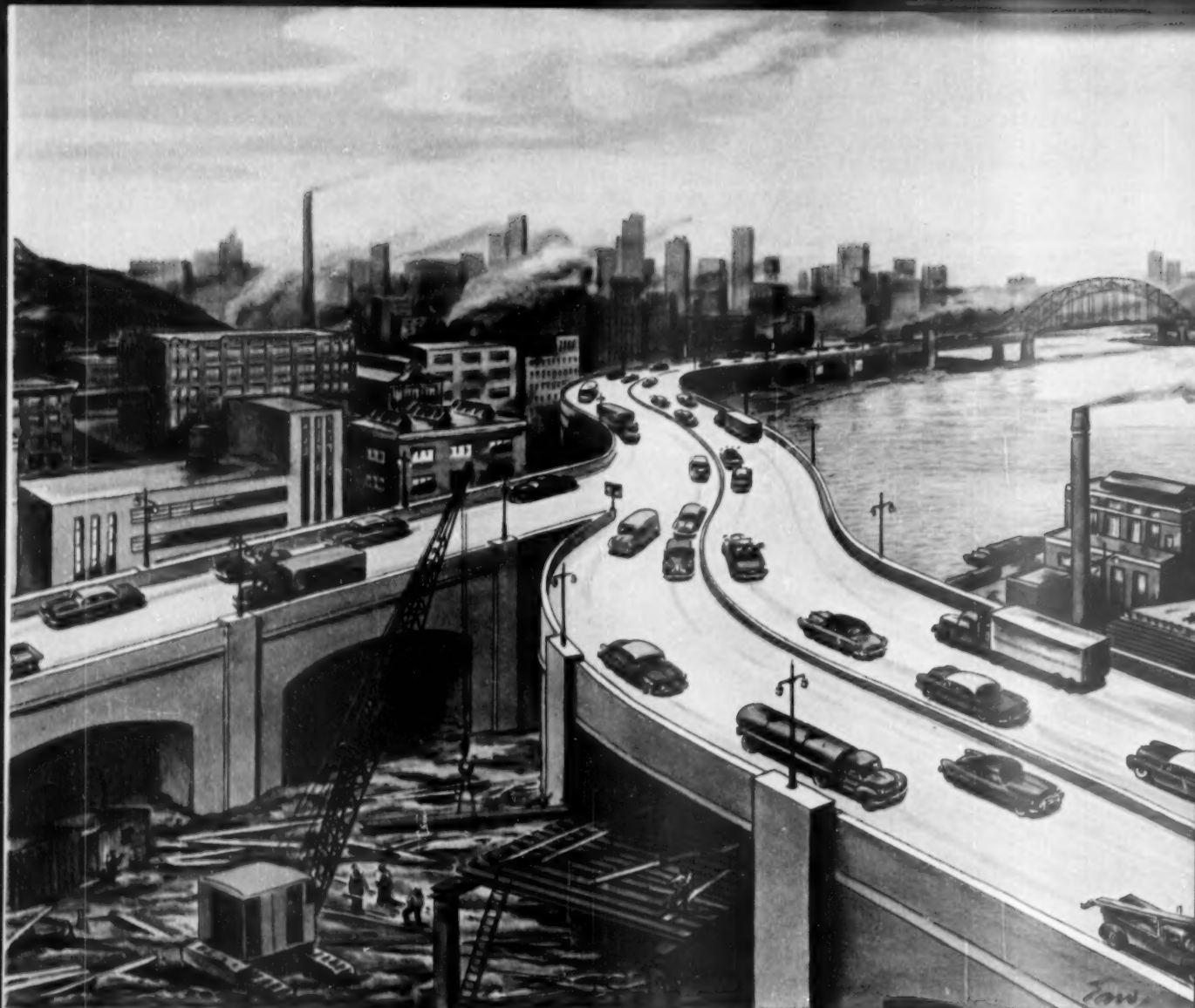
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A MCGRAW-HILL PUBLICATION

FEB. 27, 1954

E B POWER  
UNIVERSITY MICROFILMS  
313 N 1ST ST  
ANN ARBOR MICH  
C 8



## Designed to meet the demands of tomorrow

Just like the mighty superhighways they'll roll on, tomorrow's fine cars are being engineered *today!* They're being painstakingly planned—right down to the bearings—to meet the demands and competition of the years ahead. ☆ As they have in the past, dependable Bower Spher-O-Honed Bearings will be found on virtually every make! That's because these high quality bearings are scientifically built to *last indefinitely*. In fact, exclusive design features, like those shown at right, make Bower Spher-O-Honed Bearings the finest roller bearings obtainable. ☆ The complete Bower line of tapered, straight and journal roller bearings includes a size and type for *your* product—whatever it may be. Let a Bower engineer assist you while it's still in the blueprint stage.

BOWER ROLLER BEARING COMPANY • DETROIT 14, MICHIGAN



### ADVANCED SPHER-O-HONED DESIGN CUTS UPKEEP COSTS

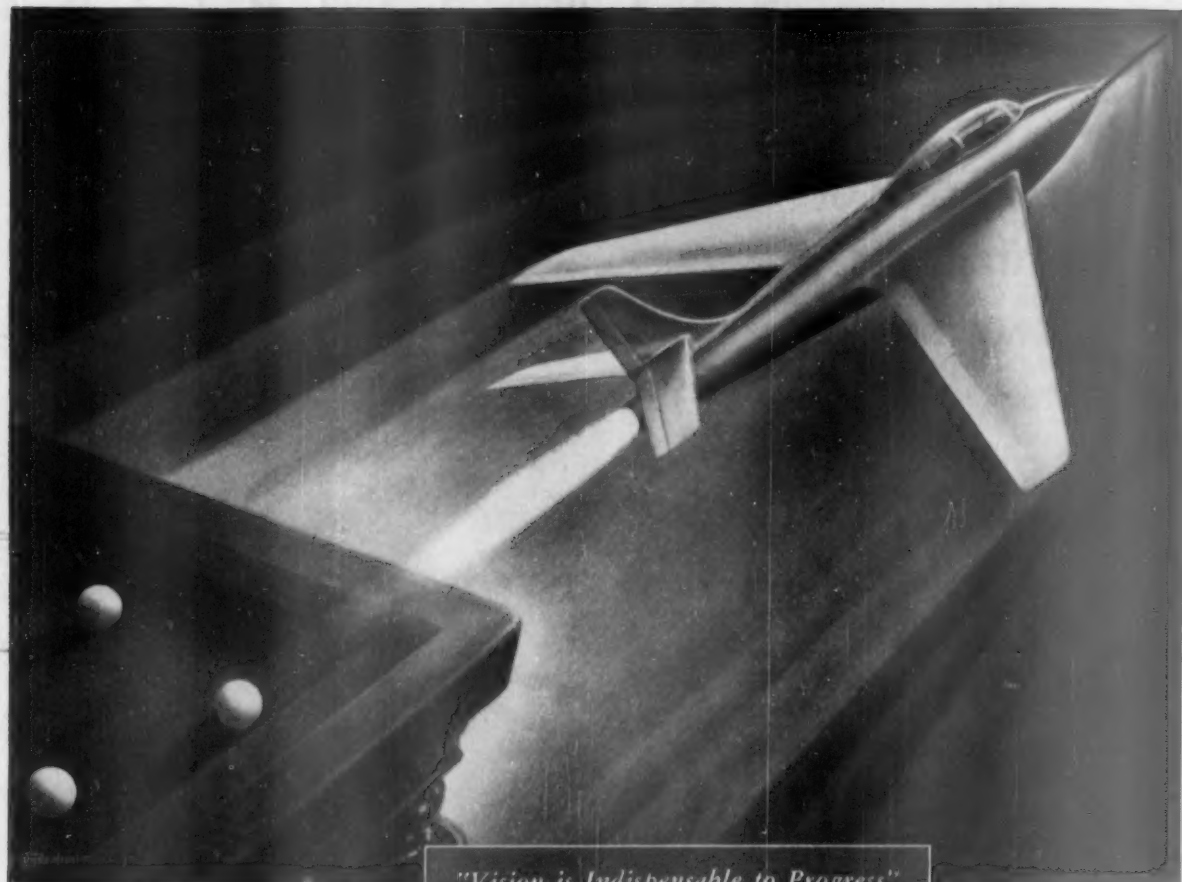
Spherically generated roll heads • Higher flange with larger two-zone contact • Larger oil groove • Honed races • Highest quality materials • Precision workmanship



# BOWER

ROLLER BEARINGS





*"Vision is Indispensable to Progress"*

## From the billiard ball of yesterday . . . streaks the jet plane of tomorrow

An ivory shortage in 1868 inspired a young printer, John Wesley Hyatt, to devise a new material for making billiard balls. He evolved a composition called celluloid...and the U.S. plastics industry was born.

Starting with the manufacture of collars, cuffs and combs, the industry took its second major step in 1909, when Dr. Leo Baekeland produced the first phenolic, Bakelite, which could be cast, formed under heat and pressure, and laminated.

In the next 17 years, cold molded and casein plastics were developed. Then in quickening tempo came thermoplastic molding and a whole group of new plastic raw materials: the acrylics, cellulose, melamines and ureas, nylon, polyesters, polyethylenes, polystyrenes, saran and vinyls, and others.

Today, plastics are being combined to produce almost any property desired in finished products—

lightness, strength, endurance, contour, wide range of colors, adaptation to mass production methods and, often, lower cost. Some 5,000 U.S. companies—manufacturers, processors, fabricators and finishers, employing 200,000 workers—make plastics their main business.

From tea cups to irrigation pipes, from clothing and luggage to swimming pools, from toys to bullet-proof vests, plastics have become so essential to modern living that courses in Plastics are now given by 71 colleges.

Along with an annual output topping \$1½ billion in retail sales, goes constant research to create new and

improved products for civilian, industrial and military use. Among them: foam-plastic and glass-reinforced plastic products for home and office; strong, beautiful sports bodies for automobiles. Astonishing advances in jet plane manufacture are being hastened by use of plastic components that decrease weight, increase stamina and safety at supersonic speeds. The F-84 Thunderjet has 225 reinforced plastic parts.

The great plastics industry, operating in the atmosphere of a free competitive business system, promises to enrich the lives of each succeeding generation in countless ways.

## BANKERS TRUST COMPANY

16 WALL STREET, NEW YORK 15, N. Y.

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION



**Many Big Moments  
begin with a  
Familiar Ring**



Often it's a call you've hoped for and waited for. From someone dear or about something especially important to you. Then suddenly there's a familiar ring. And everything's just wonderful!

Many's the time you would have paid the telephone bill for a whole month—and more—for that one call.

Whenever the telephone rings, it's a reminder of its double value. It keeps you in touch with other people. Helps other people keep in touch with you. Some days the calls you get are even more important than those you make.

Yet the cost of this two-way service is small. Less than a penny an hour for the average family.



BELL TELEPHONE  
SYSTEM



*"Jack phoned to ask me  
to the dance"*



*"A prospect telephoned  
to give me a big order"*



*"Bob, Jr., called  
to tell me it's a boy"*



*"My Scoutmaster phoned  
about a camping trip"*

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*... Until an officer of The Marine Midland Trust Company of Southern New York introduced me to a man who really knows local real estate."*

Authentic firsthand facts about business properties and market conditions almost anywhere in New York State are often available when The Marine Midland Trust Company of New York is your bank.

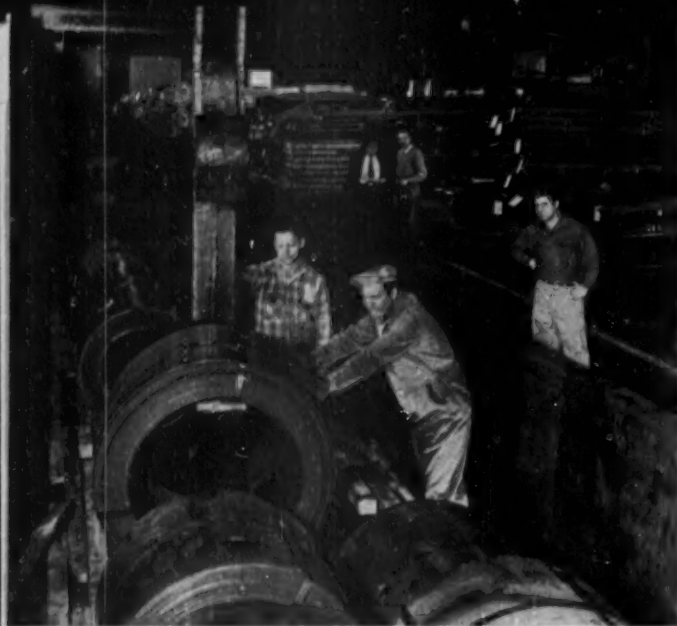
In 9 principal trading regions of New York State, affiliated Marine Midland banks have 125 offices serving 61 cities and towns. Each officer knows his own area and its people as only a local resident can. Let us show you how this "next-door-neighbor knowledge" can be useful in your business.



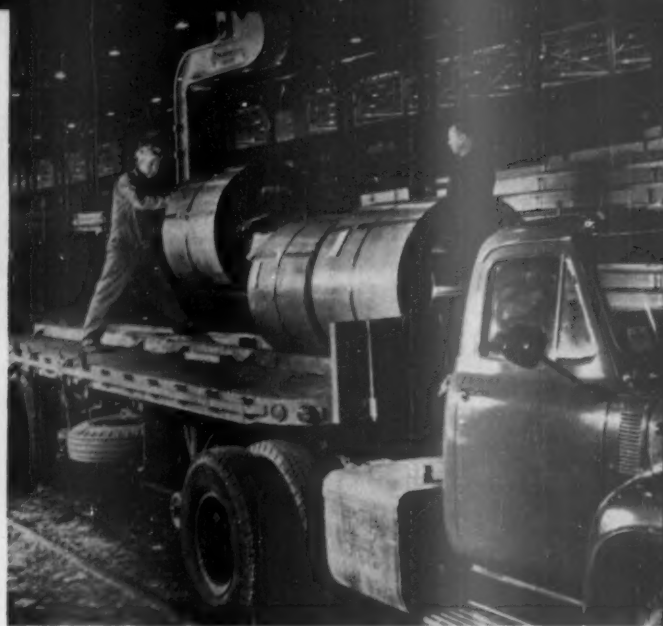
**The MARINE MIDLAND TRUST COMPANY of New York**

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Whether you specify shipment by rail . . .



by truck . . .

## Pittsburgh Steel's Goal: Making Delivery Meet Your Production Requirements for Hot

Making high quality steel sheet to exacting specifications on special order for many customers, each manufacturing different products, is a complicated job. It takes plenty of headwork to start each order with selected raw materials and deliver the finished sheet to the customer's plant when and how he wants it delivered.

Last summer Pittsburgh Steel Company opened a brand new hot rolled sheet mill at Allenport, Pa., on the Monongahela River near Pittsburgh. Right now, second quarter orders are being booked for cold rolled sheets from the company's new cold mill being readied at the same plant for first production in March. Prob-

lems of proving-in these new facilities make production scheduling and deliveries even more difficult.

Yet the schedulers who are teaming up with production and traffic, men to carry out this all-important assignment have a lot in their favor.

Pittsburgh Steel is a tightly knit, integrated producer. The close prox-



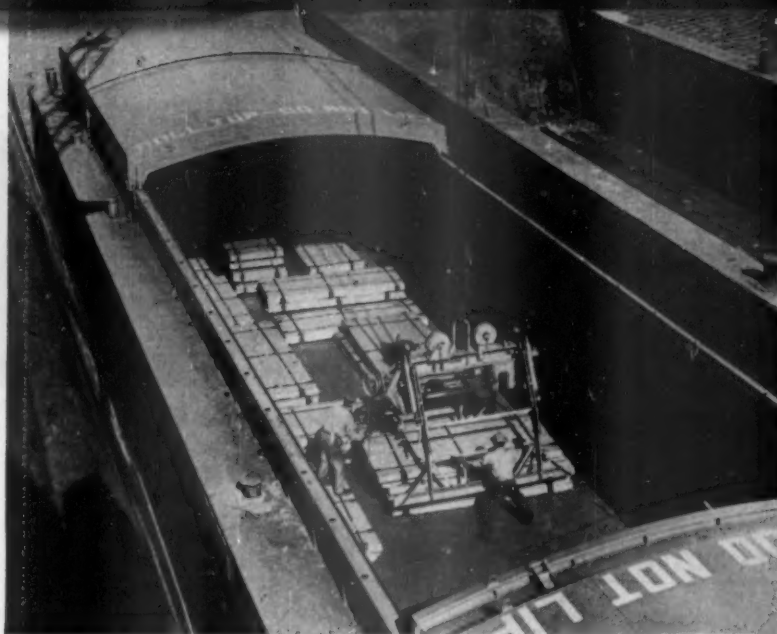
Incoming Orders from district offices for sheet steel are scheduled by George McLaughlin.



Central Control order scheduling chief, Dan Neuman (center) works out a "toughie" with "Ban" Roberts (right), chief sheet scheduler and his assistant Cecil Carroll (left).



Production Scheduling at both Monessen and Allenport comes under "Don" Shaughnessy.



or by barge, here's ...

## Schedules and Cold Rolled Sheets

imity of its plants and central sales control contribute to ease and speed in handling orders. Large enough to produce big tonnages, it is still small enough to have great flexibility.

• **Here's what this means to you—** From the time you place your order with Pittsburgh Steel, until it is delivered to your plant, your order is handled on a more personal basis. Throughout the company—from sales through the scheduling and production departments to traffic—your order gets more individual attention.

Today with steel plentiful and the emphasis on quality and service at the lowest possible price, customers must have accurate information on steel deliveries. They don't want steel coming in ahead of time because it lies around unused, costs extra money. And they don't want it to arrive late because that throws production schedules off and costs still more money.

Pittsburgh Steel men understand and appreciate these problems. Once your order is placed, they go to work conscientiously to fill your requirements. They don't always do the job perfectly. Just as with other produc-

ers, errors occur. But through the experience gained during the proving-in period for the hot rolled sheet mill, progress is being made and errors are occurring less frequently.

Above all else, this is the goal: To give you the finest quality hot and cold rolled sheet and strip, and the most dependable service that it is possible to produce with some of the industry's most modern rolling equipment. From the salesman who works directly with you to the last man in the shipping department, Pittsburgh Steel has teamed up to accomplish this goal.

Next time you need flat rolled steel, why not talk to a man from Pittsburgh Steel?



Transportation of the finished product is directed by Larry Weber (left) assistant to general traffic manager, George Dittmar (center) and "Ed" Siemon (right) of traffic department.



Shipping Steel Sheets from the mill at Allenport is the responsibility of "Ed" Fisher.

*"Everything New But The Name"*

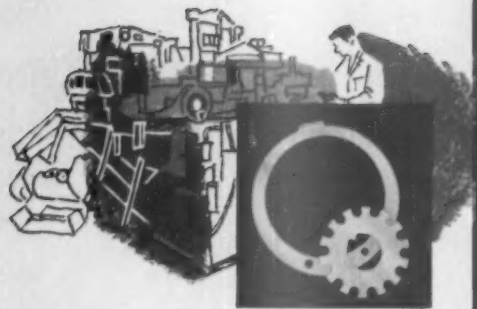
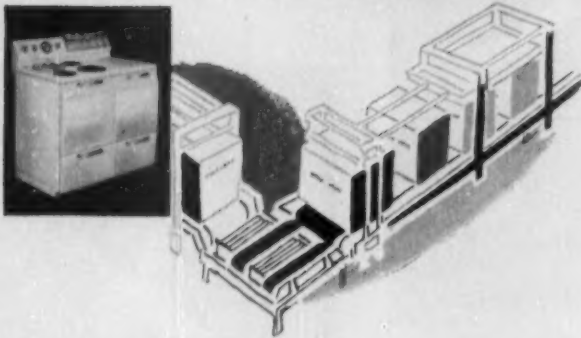
# Pittsburgh Steel Company

Grant Building • Pittsburgh 30, Pa.

Sales Offices in Principal Cities Throughout the Country

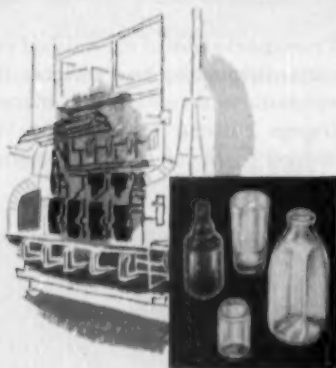


Largest shipping case gluer and sealer  
ever built by Standard-Knapp reduces by  
50% the cost of packaging electric ranges



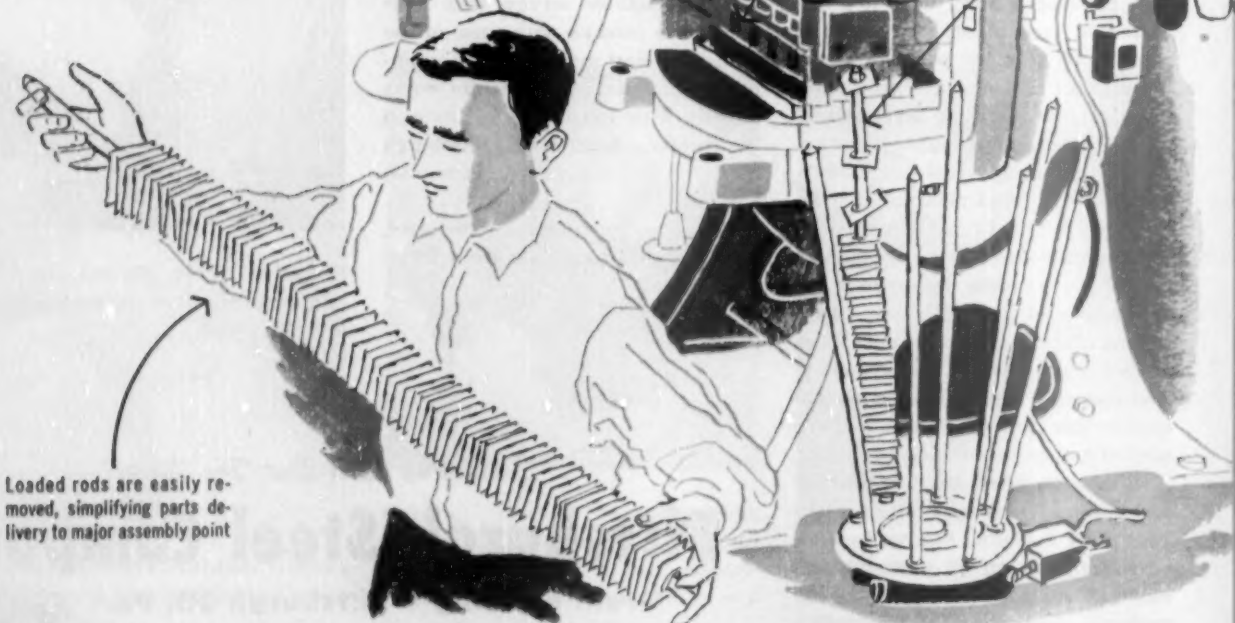
Wallace Barnes, Division of Associated Spring,  
gets ten times as many stampings between  
grinds with Henry & Wright Dieing Machine

### IN QUICK RHYTHM V&O PRESSES PRODUCE FINISHED PARTS



Part of a complete line of equip-  
ment for glass manufacturing,  
Hartford-Empire I.S. Machine forms  
bottles and jars at high speeds,  
to highest quality standards

Coiled strip is fed  
into die automatically



Loaded rods are easily re-  
moved, simplifying parts de-  
livery to major assembly point



# automation that's down-to-earth

*is one of many ways Emhart companies  
help customers boost product salability*

With each stroke V & O press  
performs eight operations

Finished parts are stacked on rods  
which are automatically indexed

Power presses with dies merely form metal items. But add mechanical feeding, transferring and assembling devices — as V & O is doing for an increasing number of companies — and power presses literally become factories in miniature. Integrated mechanical motions replace separate and scattered manual movements. Manhour productivity increases. The human factors in quality control are minimized. From the resulting lower product cost and better product quality, comes improved product salability.

The other Emhart divisions are equally skilled in knocking the supports out from under "solidified" costs. Henry & Wright Dieing Machines demonstrate every day that new and unexpected savings are possible in metalworking. Standard-Knapp, with its wide experience in packaging techniques, can help you realize new economies in packing and preparing your product for shipment. If you produce glass products, the outstanding equipment and resources of Hartford-Empire are available.

## Emhart Mfg. Co.

*Only the best is good enough*

### NEW LITERATURE

Check any product information  
you want and mail this coupon to  
any Emhart unit listed below . . .

#### ☐ HENRY & WRIGHT



Division of  
Emhart Mfg. Co.  
510 Windsor Street  
HARTFORD 5, CONN.

#### ☐ HARTFORD-EMPIRE CO.



Division of  
Emhart Mfg. Co.  
HARTFORD 2, CONN.

#### ☐ THE V & O PRESS CO.



Division of  
Emhart Mfg. Co.  
400 Union Turnpike  
HUDSON, NEW YORK

#### ☐ STANDARD-KNAPP



Division of  
Emhart Mfg. Co.  
PORTLAND, CONN.

### GLASS

- |   |   |
|---|---|
| <input type="checkbox"/> Batch Chargers | <input type="checkbox"/> Forming Machines |
| <input type="checkbox"/> Feeders        | <input type="checkbox"/> Lehr Loaders     |
| <input type="checkbox"/> Lehrs          | <input type="checkbox"/> Unit Melters     |

### PACKAGING MACHINES

- |   |   |
|---|---|
| <input type="checkbox"/> Unloaders        | <input type="checkbox"/> Packers                      |
| <input type="checkbox"/> Rinsers          | <input type="checkbox"/> Labelers                     |
| <input type="checkbox"/> Cartoners        | <input type="checkbox"/> Case Cleaners                |
| <input type="checkbox"/> Gluers & Sealers | <input type="checkbox"/> Palletizers & De-palletizers |

### METAL WORKING

- |   |
|---|
| <input type="checkbox"/> Henry & Wright Dieing Machines           |
| <input type="checkbox"/> Henry & Wright "Press Load Calculations" |
| <input type="checkbox"/> Henry & Wright Case Histories            |
| <input type="checkbox"/> V & O Inclinable Presses                 |
| <input type="checkbox"/> V & O Notching Presses                   |
| <input type="checkbox"/> V & O Roll and Dial Feeds                |
| <input type="checkbox"/> V & O Feed-O-Matic                       |

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY & STATE \_\_\_\_\_

**First Again!**  
*MobilMatic* **MOBILIFT**  
 with OIL-SMOOTH Constant-Mesh Transmission  
 Engineered Especially for FORK TRUCKS



For years Mobilift users have benefited by Mobilift "firsts". Mobilift consistently sets the trend in bringing engineering progress to the field of fork lift trucks. Every part of a Mobilift is designed and built for rugged use and to give maximum performance at the lowest operating costs.

**First** with an Oil Immersed Multiple Disc Clutch especially designed for fork trucks.

**First** with Lev-R-Matic—No Gear Shift...No Clutch Pedal...ONE-Lever Control.

**First** with FREE LIFT to give maximum lifting height before inner mast raises.

**First Again!**  
 with *MobilMatic* **DRIVE**

The oil-smooth, high and low range, constant mesh transmission with fluid coupling to the Chrysler 6-cyl. engine. There's **NO CLUTCH PEDAL**—just **ONE** direction selector lever.

**First with HYDRA-LIZER**

The hydraulic equalizer on the steering wheels for cross-compensating truck and load over bumps...

**GIVES YOU THIS...**



**NOT THIS**



**MODEL D-424**

4,000-lb. cap. at 24" Load Center. 83" Mast, 128" lift, 64" Free Lift.



And **FIRST** with **ONE-PIECE HOOD** that raises easily for full access to engine compartment.

**WRITE TODAY**

for complete details on the New Mobil-Matic MOBILIFT or contact your nearest Lamson-Mobilift office.

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**READERS REPORT**

**Light Radiators**

Dear Sir:

In the Jan. 9 issue of *BUSINESS WEEK* on page 132, your readers are advised to repaint gold, aluminum or dark-colored radiators in either white or yellow color to improve the efficiency of heat transmission.

A hot body gives off heat to the cooler surroundings in three ways... conduction, convection (circulation of air heated by contact), and radiation (heat waves). Heat conduction would be reduced by adding an "insulating" coat of paint of any color, this would tend to reduce the surface temperature, thus indirectly decreasing convection and radiation. Heat radiation is increased by darkness and roughness of the surface and diminished by lightness and polish (according to Pender's Handbook for Electrical Engineers). Thus, considering heat radiation only, a dull or "flat" black surface should be best.

If white or yellow is more efficient, as you state, it must be that heat is transferred to the air by contact better from a light-colored surface, and that such increase in heat transfer exceeds the decrease in radiated heat resulting therefrom as compared to a dull, dark surface...

It is no fun painting radiators and I would first want to know for sure that it would pay me in comfort if not in dollars and cents...

S. C. HAYWARD

HOME INSTRUMENT DEPT.  
 RADIO CORP. OF AMERICA  
 RCA VICTOR DIVISION  
 CAMDEN, N. J.

Dear Sir:

I am amused by the last item on the *Personal Business* page [BW—Jan. 9 '54, p132], on the color of radiators.

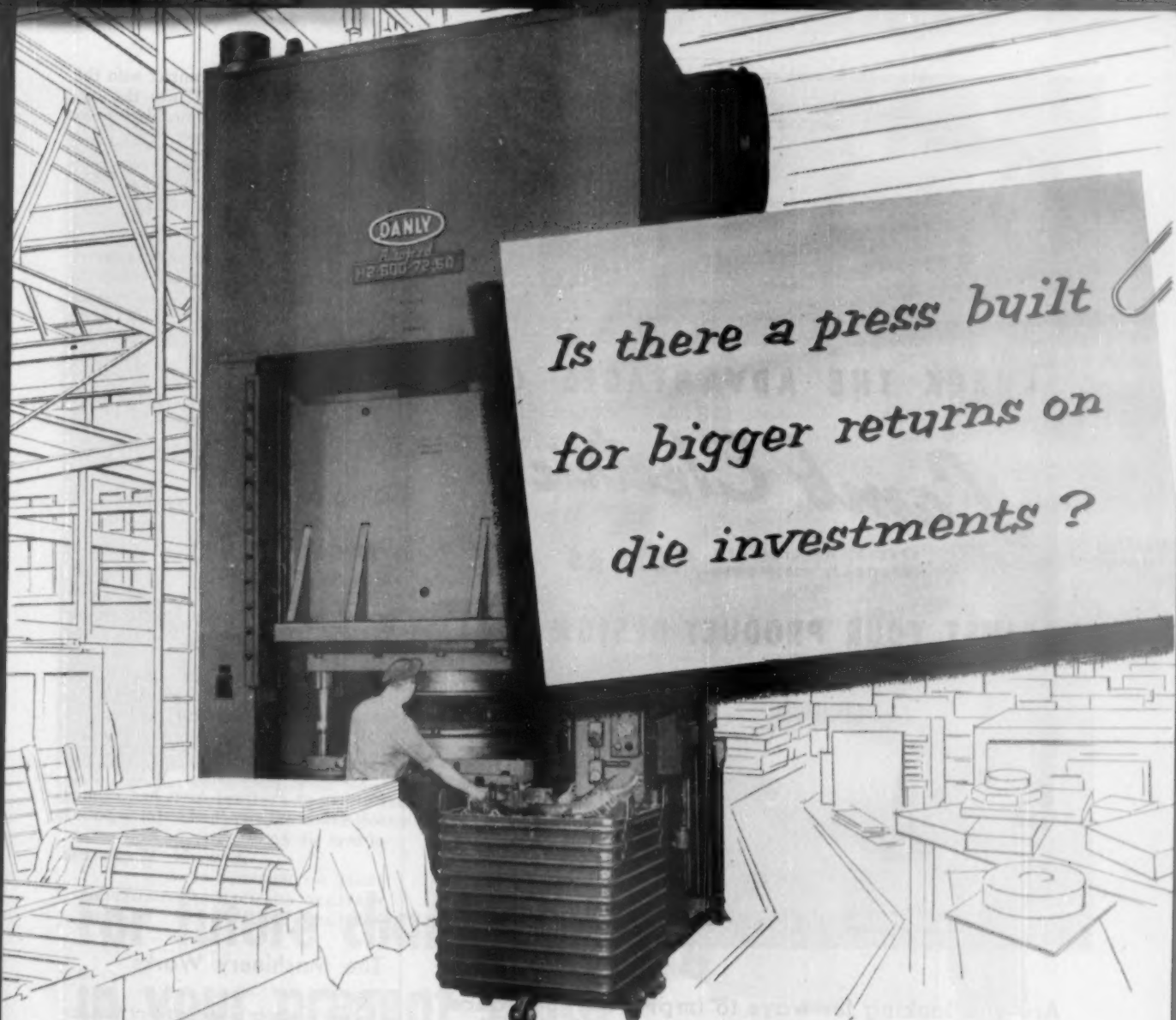
What basis do you claim for a light color being better (for heat transmission) than a dark color?

My high school physics taught me that black is the best "hot body" for radiation.

STEPHEN ADAMS, JR.

S. G. ADAMS CO.  
 ST. LOUIS, MO.

• Most color and paint experts, as well as the U. S. Bureau of Standards, recommend light paint for home radiators. The reason comes down to heat transmission—what you're after is a warm room, not a hot radiator. A film of black paint slows transmission because it tends to absorb and hold heat, rather than heating the air around it. But white paint repels heat, thus gives more circulation—and a warmer room—be-



*Is there a press built  
for bigger returns on  
die investments?*

## **DANLY PRESSES** *help increase die life*

Costly dies prepared for stamping motor armature laminations represent an investment that must pay off in production efficiency. Along with die design and material handling methods goes the selection of the *right presses* to insure this die performance.

Danly's *rigid, balanced, precise construction* decreases vibration and deflection, increases die life. In General Electric's plant at Erie, Pa., Danly Autofeed Presses are helping to make investment in lamination dies pay off. The slide to bed parallelism of these Presses was set to a total variation of only .002" at installation. After two years of operation, this original setting has not varied!

There are basic reasons for Danly Press *precision performance* . . . and definite reasons why management finds it pays to be *cost conscious* instead of *price conscious* in purchasing mechanical presses. If your manufacturing process involves high production and expensive dies, it will probably be worth your while to talk with a Danly Press Engineer. Call one now—he will be glad to discuss your specific problems. There is no obligation for this service.

### **PROVED AGAIN . . .**

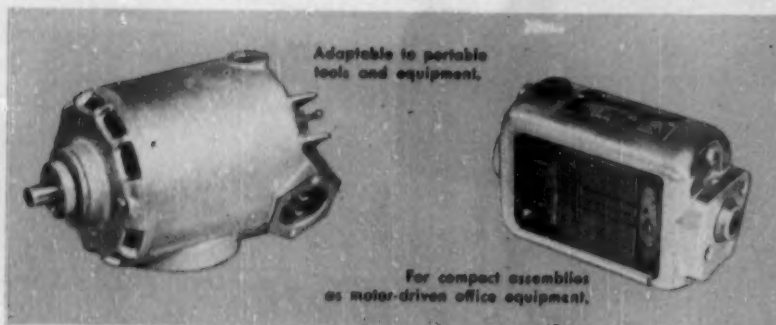
**It costs less to run a DANLY PRESS!**



MECHANICAL PRESSES 10 TO 3000 TONS  
SINGLE, DOUBLE, TRIPLE ACTION  
AUTOFEED . . . UNDERDRIVE

**DANLY MACHINE SPECIALTIES, INC.**  
2100 South Laramie Avenue, Chicago 50, Illinois



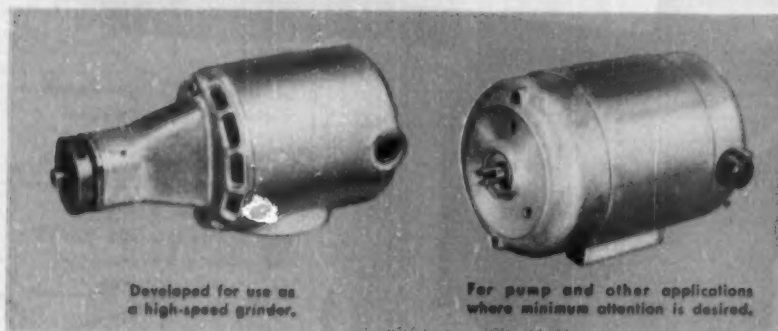


CHECK THE ADVANTAGES OF

**Lamb Electric**

SPECIAL APPLICATION FRACTIONAL HORSEPOWER **MOTORS**

AGAINST YOUR PRODUCT DESIGN GOALS



Are you looking for ways to improve appearance, reduce weight, decrease maintenance, and at the same time lower the cost of your product?

If you are, it will pay to consider the use of a Lamb Electric motor, *specially engineered* to provide exact electrical and mechanical requirements.

We shall welcome an opportunity to discuss the benefits of a Lamb Electric motor in terms of your product design goals.

**THE LAMB ELECTRIC COMPANY • KENT, OHIO**

In Canada: Lamb Electric — Division of Sangamo Company Ltd. — Leaside, Ontario



cause a light surface in contact with the air transmits more heat into the surrounding atmosphere. Thus black paint gives you a hotter radiator, light paint a warmer room.

## Personal Tax Business

Dear Sir:

... Enjoy your magazine tremendously—and think *Personal Business* was a swell addition to your regular features. However, the tax form to be filed in connection with a credit for foreign taxes [BW—Feb.13'54,p179] is 1116, not 116.

WILLIAM L. RABY  
CERTIFIED PUBLIC ACCOUNTANT  
SWENSON & RABY  
ROCKFORD, ILL.

• This was a typographical error.

## Aged in the Can

Dear Sir:

In the Jan. 30 issue of *BUSINESS WEEK*, on page 47, you have quite an article ... Soft Drinks: Will the Cans Take Over?

Therein you mention that White Rock Bottling Co. of Los Angeles is already in production with such canned drinks and will soon open up in Tacoma.

For your information, White Rock Bottlers of Portland have had canned soft drinks on the market for a period of over six weeks. ...

EDW. N. WEINBAUM  
TRADE & COMMERCE DEPT.  
PORTLAND CHAMBER OF COMMERCE  
PORTLAND, ORE.

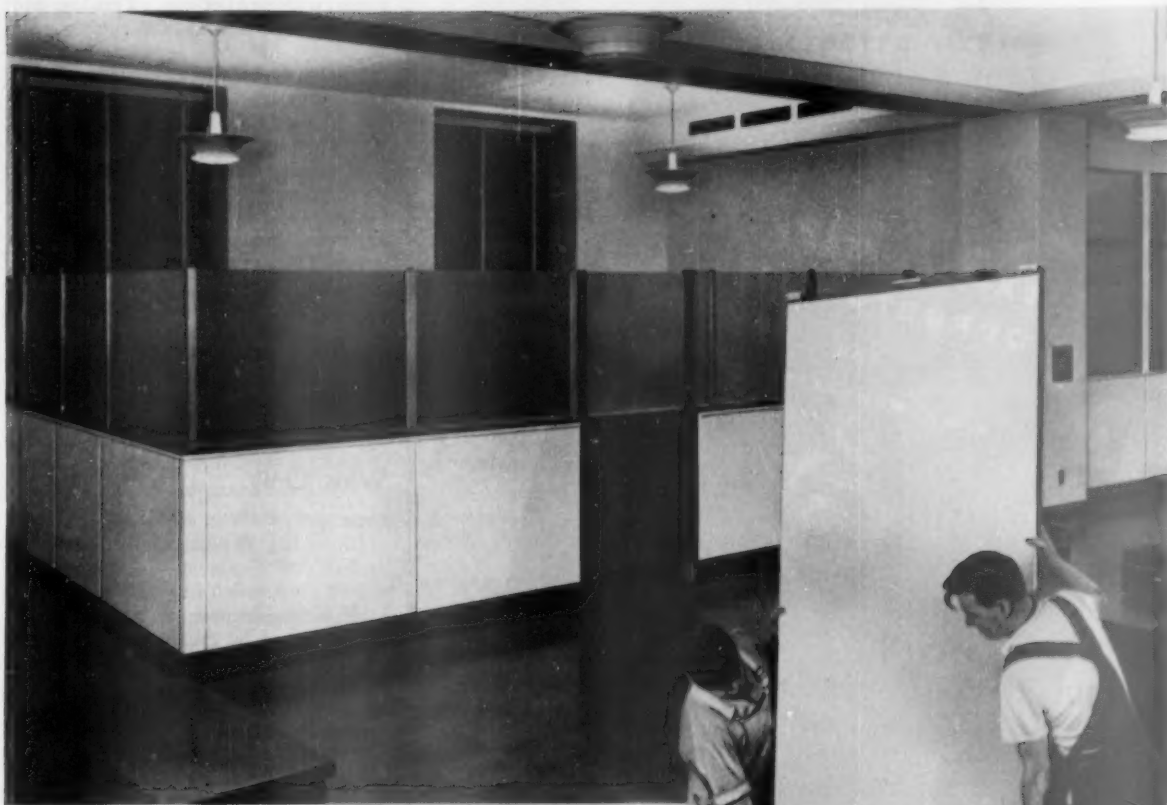
## The Machinery Works

Dear Sir:

Your footnote to the letter of Vanderveer Voorhees concerning paving costs on the Ohio Turnpike [BW—Jan.16 '54,p12] overlooks the fact that Mr. Voorhees made a wrong assumption when he estimated the cost of concrete paving on the turnpike.

Mr. Voorhees appears to think that the figure *BUSINESS WEEK* gave as the cost of the Ohio Turnpike was just the cost of paving it, because he took your figure of \$326-million and divided that by his estimate of the number of square yards of paving on the turnpike. That gave him a cost of \$46.90 per sq. yd. for the concrete paving. This he set over against a cost of \$2.50 per sq. yd. for concrete paving in Illinois back in the twenties, and states that the "fancy road machinery we use today is not very impressive if it cannot do a better job of holding down costs."

Obviously, the figure of \$326-million that BW gave in its Dec. 5 issue was the entire cost of the project, including



Both free-standing and ceiling-high J-M Movable Walls are used to create these private and semi-private offices. They may readily be dismantled and re-created in a new arrangement to meet changing space requirements.

## For future changes in your present space

**Johns-Manville Asbestos Movable Walls provide offices when and where you want them**

**YOU** can rearrange existing offices or partition new space quickly and economically with Johns-Manville Asbestos Movable Walls.

These flush-type, asbestos panels have a clean, smooth surface that's hard to mar, easy to maintain... and extra strong to withstand shock

and abuse. Also, they are light in weight, easy to install and relocate. The "dry wall" method of erection assures little or no interruption to normal business routine.

Johns-Manville Asbestos Movable Walls may be used as ceiling-high or free-standing partitions. The

complete wall, including doors, glazing and hardware, is installed by Johns-Manville's own construction men under the supervision of trained J-M engineers—*responsibility is undivided.*

An estimate will convince you that the cost of J-M Movable Walls compares favorably with other types of wall construction. For details write Johns-Manville, Dept. BW, Box 158, N. Y. 16, N. Y. In Canada write 199 Bay St., Toronto 1, Ont.

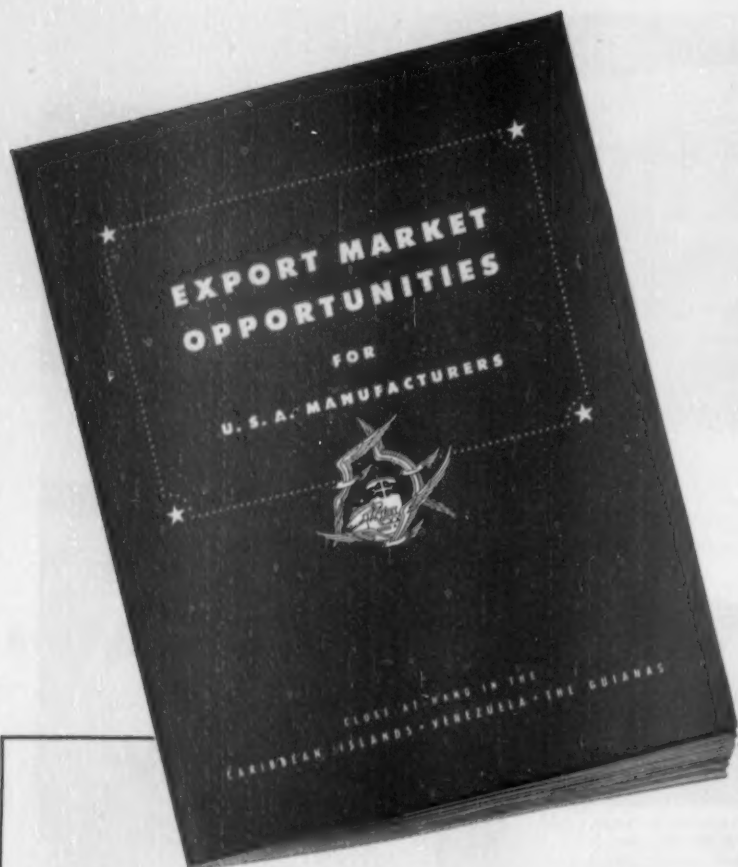


**Johns-Manville**

**ASBESTOS**

*Movable Walls*

INSTALLED NATIONALLY BY **JOHNS-MANVILLE**



## To Sales Executives

who wonder how they can sell all  
the factory can produce in 1954

This free book tells about a big "overseas" market right next door to you. Did you know that the Caribbean area—famous for cruises—is also a BIG market for your goods? Imports of the nearby Caribbean are well over *a billion and a half dollars a year!* And growing fast! Goods of every conceivable kind; mostly from the United States.

We are eager to help you, in every way possible, to develop export sales there.

The first step is to get the book. It tells you how much of *your* type of products the Caribbean *now* imports annually.

Just a note on your letterhead, and the "Export Market Opportunities" book will be in the mail to you.

Dept. BW-2

ALCOA STEAMSHIP COMPANY, INC.

17 Battery Place, New York 4, N. Y.

a new, wide right-of-way, all grading and paving costs, and as BW noted, the high cost of grade separations at all intersections with other highways.

Actually, the contract price for paving on the Ohio Turnpike will average \$5.59 per sq. yd., not \$46.90. And it is of interest to note that developments in equipment for laying concrete paving since the twenties have resulted in less rise in the cost of paving than there has been in most other types of construction. The "fancy road machinery" is doing a fine job of holding down highway costs.

V. T. BOUGHTON

ASSOCIATE EDITOR  
ENGINEERING NEWS-RECORD  
NEW YORK, N. Y.

### Wire Only

Dear Sir:

In the Jan. 30 issue of BUSINESS WEEK under New Products Briefs, page 82, you . . . mention a new electric heating cable for the melting of snow on roofs, manufactured by the Driver-Harris Co.

. . . The electric heating cable mentioned is manufactured by the Rockbestos Products Corp. in New Haven, Conn. The Driver-Harris Co. produce and supply the resistance wire in this element. . . .

R. F. COYLE

ADVERTISING MANAGER  
ROCKBESTOS PRODUCTS CORP.  
NEW HAVEN, CONN.

### Computation Centers

Dear Sir:

In the Dec. 19 issue of BUSINESS WEEK on page 30 . . . you state in the article, Detroit Builds a Computation Center, that this center is believed to be the only one in the country not government financed.

. . . The Raytheon Manufacturing Co. has had a computation services department for almost two years. . . .

T. R. PORTER

EQUIPMENT ENGINEERING DIVISION  
RAYTHEON MANUFACTURING CO.  
NEWTON, MASS.

### Making It Clearer

Dear Sir:

The article . . . on page 102 of the Jan. 23 issue of BUSINESS WEEK [on vacuum packing for lettuce] is most interesting. Since corrugated fibre board shipping containers, usually referred to as shipping containers, is one of the factors that made this vacuum packing possible, it might have been as well to make this clearer.

BRYANT W. LANGSTON

PRESIDENT  
SAMUEL M. LANGSTON CO.  
CAMDEN, N. J.



Your business is in the Age of Electronics

## Measure rotational speeds to 3,000,000\* r.p.m. without mechanical loading or connections

Electronic tachometers, counters, light cells—these are three of many new electronic test instruments industry now uses to speed engineering and improve manufacturing.

Easily used by non-technical personnel, such instruments simplify production and quality control by giving instantaneous and continuous indication of r.p.m. and acceleration, or serving as an automatic overspeed control. In your laboratory, these same instruments often provide information not otherwise obtainable.

Hewlett-Packard is a pioneer and world leader in electronic test instruments—basic measuring tools used throughout

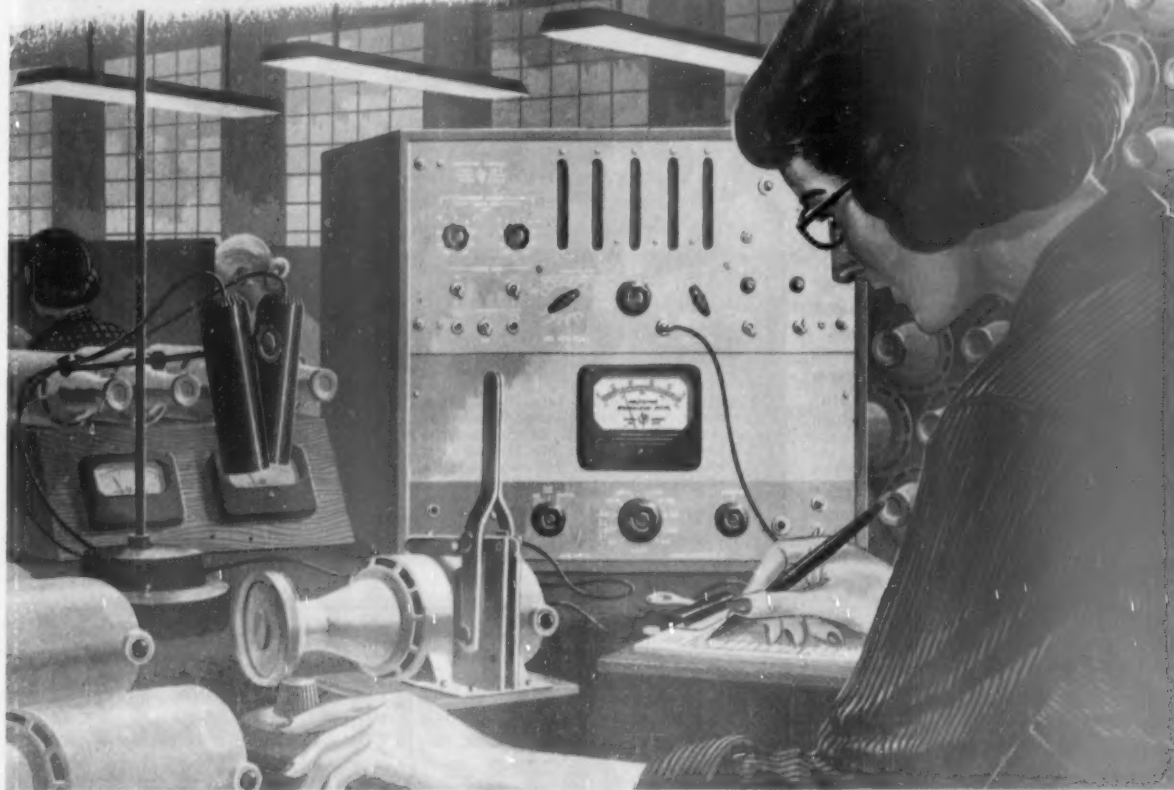
manufacturing, research, communications and military installations. Correct application of such instruments is of primary importance; Hewlett-Packard field engineers can recommend and provide the right instrumentation for your r.p.m. measurement or overspeed control problem. Why not write us about your problem today. You will receive a prompt reply.



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INSTRUMENTS

The very high speeds of turbines, jet engines, grinding and dental equipment—even flea-power mechanisms—can be measured with 2% accuracy using -hp- electronic tachometers. For higher accuracy, 0.1% or better, -hp- electronic counters may be used. Speeds to 3,000,000\* r.p.m. are measured safely, easily—even at remote locations—without loading or mechanical connection.

\*Mechanically, this speed has yet to be achieved. But when it is, present-day -hp- instruments will measure it readily.



HEWLETT-PACKARD COMPANY

DEPT. B, 395 PAGE MILL ROAD • PALO ALTO, CALIFORNIA

2070

*What is there about Wausau, Wisconsin, that makes it the ideal home for one of the world's most important insurance companies?*

*Employers Mutuals of Wausau invited a Chicago newspaper columnist to visit its hometown and find out.*



# Wausau Story

By PHIL HANNA, Business Columnist of The Chicago Daily News

THE conductor on the train knew Wausau. "Good town," he said. "Wausau people are like Texans—they wouldn't want to live anywhere else."

I soon began to see why. My first visit was in Anton Paszek's barber shop. "We're too big now," said Anton, "for everyone in town to know everyone else. But you won't find many places that beat Wausau for people liking each other and giving each other a hand."

At Ploss' Drug Store, Baumann's Hardware, everywhere I went, I heard more about the good spirit of this city.

Even the "coffee break" in Wausau is a special thing. A company president, or even a chairman of the board, will sit around the table with his employees, relaxing together over a cup of coffee and talking over common problems.

I heard one story that gave me a good slant on Employers Mutuals. The Company's Board Chairman, Mr. H. J. Hagge, had a birthday some time back. The high school band went over and played "Happy Birthday To You!" under his window. That means to me that Mr. Hagge must be a good person to know. And it means that this company he has headed for many years must be a good one to do business with.

It's only natural that Employers Mutuals would take on some of that "Wausau Personality." I found everywhere on my visit. Business is people—and Wausau people are the right kind.



Mr. Hanna drops into Ploss' Drug Store, talks with George Marsh (at cash register) and H. W. Genrich. On his visit to Wausau, Mr. Hanna went about freely, on his own, with a photographer.

## Employers Mutuals of Wausau are "good people to do business with."

There's a little bit of Wausau on the sidewalks of New York—and in 88 other cities where this Company has offices. We write all lines

of fire and casualty insurance—everything but life insurance. Our largest line is workmen's compensation. We have two reputations, born and raised in Wausau, that we aim to hold. The first is that we'd rather prevent than just pay for an accident. Our

accident-prevention program, second to none, means lower insurance costs to policyholders. The second is claim service. Handled direct by our branches, this service is unexcelled in the insurance field for care and fairness, with a signal record for prompt payments.

## Employers Mutuals of Wausau





# 80% saving on lubrication costs

by just letting Pure Oil help them **SIMPLIFY AND SAVE!**

## HERE'S HOW YOU CAN SAVE

1. Reduced inventory
2. Simplified inventory control
3. Reduced labor cost
4. Reduced errors in application
5. Simplified lubrication
6. Speeded-up purchasing

Be sure with Pure. Sales offices located in more than 500 cities in Pure's marketing area.

When a West Virginia coal mine found they were spending more than 5¢ per ton for lubrication, and loss of tonnage through breakdown was even more, they called in Pure Oil.

Within six weeks Pure Oil engineers had cut the cost down to 1¢ per ton (a savings of 80%). How? By selecting lubricants better suited to protect the machinery and, by setting up a lubrication program based upon a survey. Reducing the number of lubricants from seven to four resulted in smaller inventory and less waste. An unusual case, to be sure. Yet sizable savings have been accomplished in all types of mines, mills and factories by similar Pure Oil methods.

Send for this *free* booklet which tells you how you can *Simplify and Save* on lubrication, too!

**IT STARTS HERE**



# PURE OIL INDUSTRIAL LUBRICANTS

## FREE BOOKLET

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35 E. Wacker Drive, Chicago 1, Illinois  
Please send me your free booklet on how to "Simplify and Save"

NAME \_\_\_\_\_  
POSITION \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_



# HOW HERCULES HELPS...

Hercocel®, a Hercules cellulosic plastic, is durable, lightweight, colorful, and quickly and economically molded into intricate or thin-walled shapes. It is used for hundreds of industrial and consumer products, one of which is Connecticut Telephone & Electric's new interoffice telephone shown here.

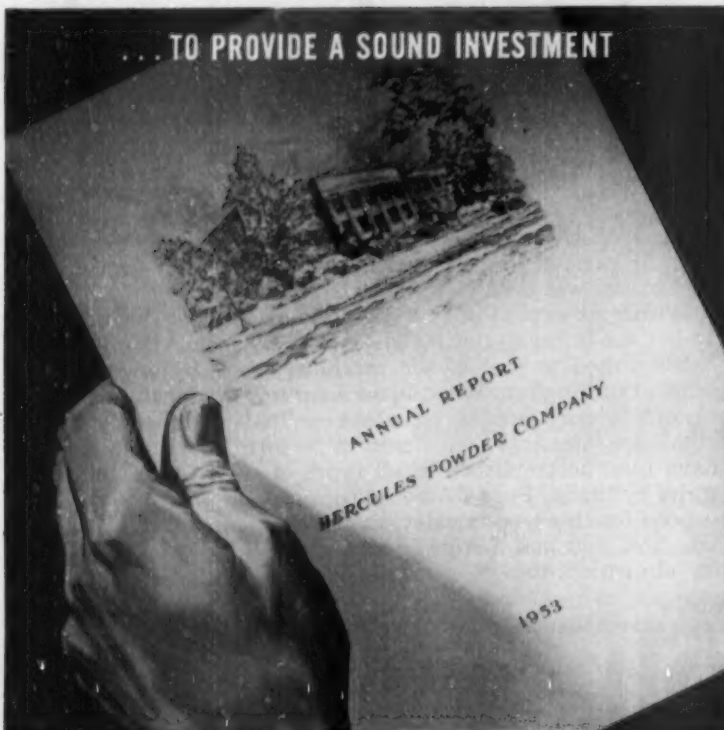
In quarrying, as in metal mining, coal mining, and construction, proper blasting with the proper explosives promotes higher production... easier work for men and machines. Hercules' 40 years of experience in the development, manufacture, and use of explosives mean top efficiency and economy.



...TO CUT BLASTING COSTS



...TO TOUGHEN PLASTIC PRODUCTS



Hercules' continuing creative research in chemical materials is reflected in an increase in sales from \$7,640,741 in 1913 to \$190,202,417 in 1953; more than 10,000 employees; and a history of 162 consecutive dividends since Hercules' organization in 1913. Send for your copy of our 1953 annual report.



Hercules' business today helps almost everyone's business. It embraces the production of synthetic resins, cellulose products, chemical cotton, terpene chemicals, rosin and rosin derivatives, chlorinated products, and many other chemical processing materials—as well as explosives. Through close cooperative research with its customers, Hercules has helped improve the processing or performance of many industrial and consumer products. If you are a manufacturer, we welcome the opportunity to work with you.

054-2

HERCULES POWDER COMPANY 968 Market Street, Wilmington 99, Del.

**HERCULES**

# BUSINESS OUTLOOK

BUSINESS WEEK

FEB. 27, 1954



The Ides of March hold unusual perils this year.

President Eisenhower has pointed a finger at mid-March as the critical period in Administration planning of antirecession measures (page 25).

At the same time, exerting an even greater-than-usual deflationary pull, is the annual impact of income tax collections.

Taxes weigh in on both sides of the business outlook.

The Administration proposes to grant deeper cuts for individuals if the unemployment trend worsens. Presumably, this would be done without lessening any of the incentive cuts for corporations.

But cuts in taxes on 1954 income don't lighten the March bill.

Corporations will be required to ante up 45% of their 1953 taxes on Mar. 15 and June 15. And the personal tax lump comes Mar. 15.

You—as well as Uncle Sam—may well watch business more closely than usual in March. Trends quite possibly will show up that will influence your planning for many months.

Don't relax, however, if all goes smoothly. The month of March may bring important clues, but it won't unfold the whole story.

—•—  
Inventories continue an enigma. People everywhere say they have been cutting down. Yet the reduction doesn't show up in the official figures, and prices don't reflect any pressures.

It is almost inconceivable that a major reduction in inventories could be brought off without some weakness in general price indexes.

So far, there has been none. Argue as long as you wish that (1) many prices had long been deflated, and (2) that high costs bar price cutting. You'll still have trouble convincing a student of the markets.

Price averages can, of course, conceal the true state of affairs.

Sharp declines in one area may be canceled by advances elsewhere.

In a very small way, that is true today.

Prices of industrial raw materials have edged off a little so far this year only to be neutralized by gains in farm products and foods. Yet the decline in the industrial category is too small to be a "correction."

—•—  
Scattered reflections of customer caution could be detected again this week among the various metals.

Operations in the steel industry were scheduled at a slightly lower rate this week. Anticipated output of 1,730,000 tons would be the lowest since before Korea (barring strike periods and weeks with holidays).

More copper mines in the Southwest shortened their work week.

A zinc refinery in Texas reduced operations by about one-fourth.

Steel men make a good case, of course, that their customers have really taken strides on inventories (page 30); mill output has fallen 25% while the level of durable goods production is down only 11%.

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

FEB. 27, 1954

New orders for steel now are coming in at a more encouraging rate.

Yet Iron Age dampens hopes of more buying by the auto companies; the magazine simply points to tight warehouse space in Detroit.

—•—

Production of automobiles may not be of boom proportions, but it is a long way from a depression level. Last week's activity, for example, was a better than  $5\frac{1}{2}$ -million-a-year rate.

The total so far is only 4% behind last year. And remember: This comparison is with the second best year on record.

Truck production isn't matching autos. Here the decline from a year ago is 12% (and the comparison is not with a near-record year).

Nevertheless, adding up the cars and buses and trucks, the industry this week turned out its millionth motor vehicle of 1954.

—•—

Turn to the T's—titanium and tungsten—and you'll get a contrast.

For titanium the future is in the clouds, but for tungsten the market is undergoing the severest kind of stress.

Titanium has proved vital and versatile in the aircraft program. Production of sponge metal was less than 500 tons in 1951; over 1,000 in 1952; 2,241 in 1953.

Now Washington asks a boost in melting capacity (new metal and scrap) from today's 8,000 tons a year to 37,500 in 1956.

Titanium is plentiful, if not abundant, in nature. Yet demand has gone up fast enough and the metal is hard enough to extract from its ores so that it still commands a luxury price.

The quotation is \$5 a lb., the same as when commercial production began (BW—Sep. 18'48, p10).

There are chances that production may soon outrun needs temporarily, the trade believes, but the excess would be stockpiled.

Tungsten's troubles go back to government contracts at \$63 a unit (the unit being wolframite content of a short ton of ore). This was one phase of the effort to build armaments.

Other users beat the bushes for tungsten at even higher prices.

Now the scramble is over, and the market is back where it was before Korea—\$16 to \$18 a unit for quick delivery.

—•—

Don't worry too much about consumer purchasing power so long as the public continues to pay these soaring prices for coffee. Roasters have just raised prices another 5¢ a lb. Green beans that brought 60¢ a lb. shortly before Christmas started this week at 80¢.

And, in case you haven't been looking, another bean has soared in that same period. Cocoa has gone from 44¢ to 54¢ a lb.



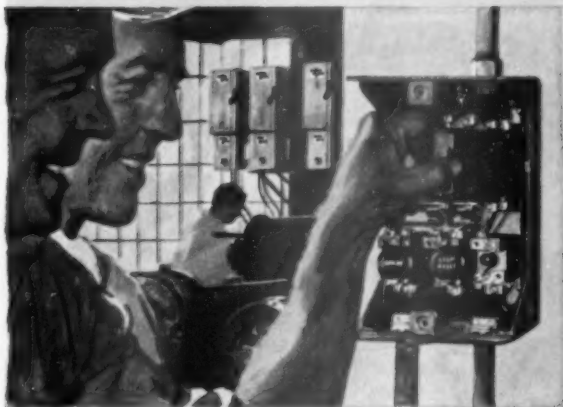
## THE THREE CUTLER-HAMMER STARS



STAND FOR THREE NEW STANDARDS

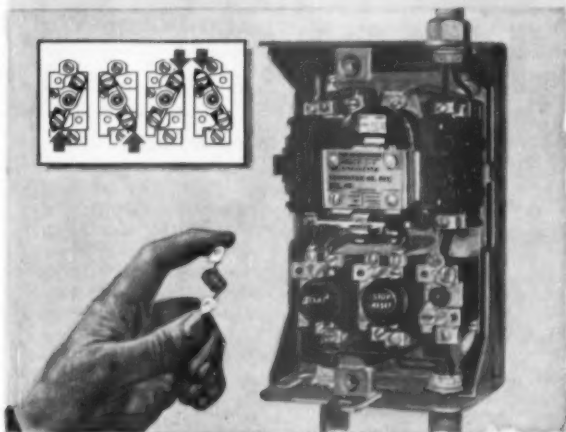
### Electrical interlocks...

Up to four extra control circuits may be added by simple installation of interlock blocks. Contacts can be normally open, normally closed, or both. A screw driver is the only tool needed.



### Adjustable overload coils...

Each heater coil can be placed in any of four positions to permit adjustment of the overload protection to within 3% of the motor rating...compared to 10% or 12% on competitive control.



★ *installs easier*

★ *works better*

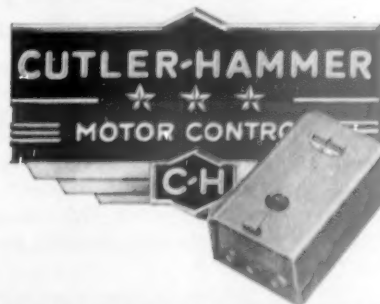
★ *lasts longer*



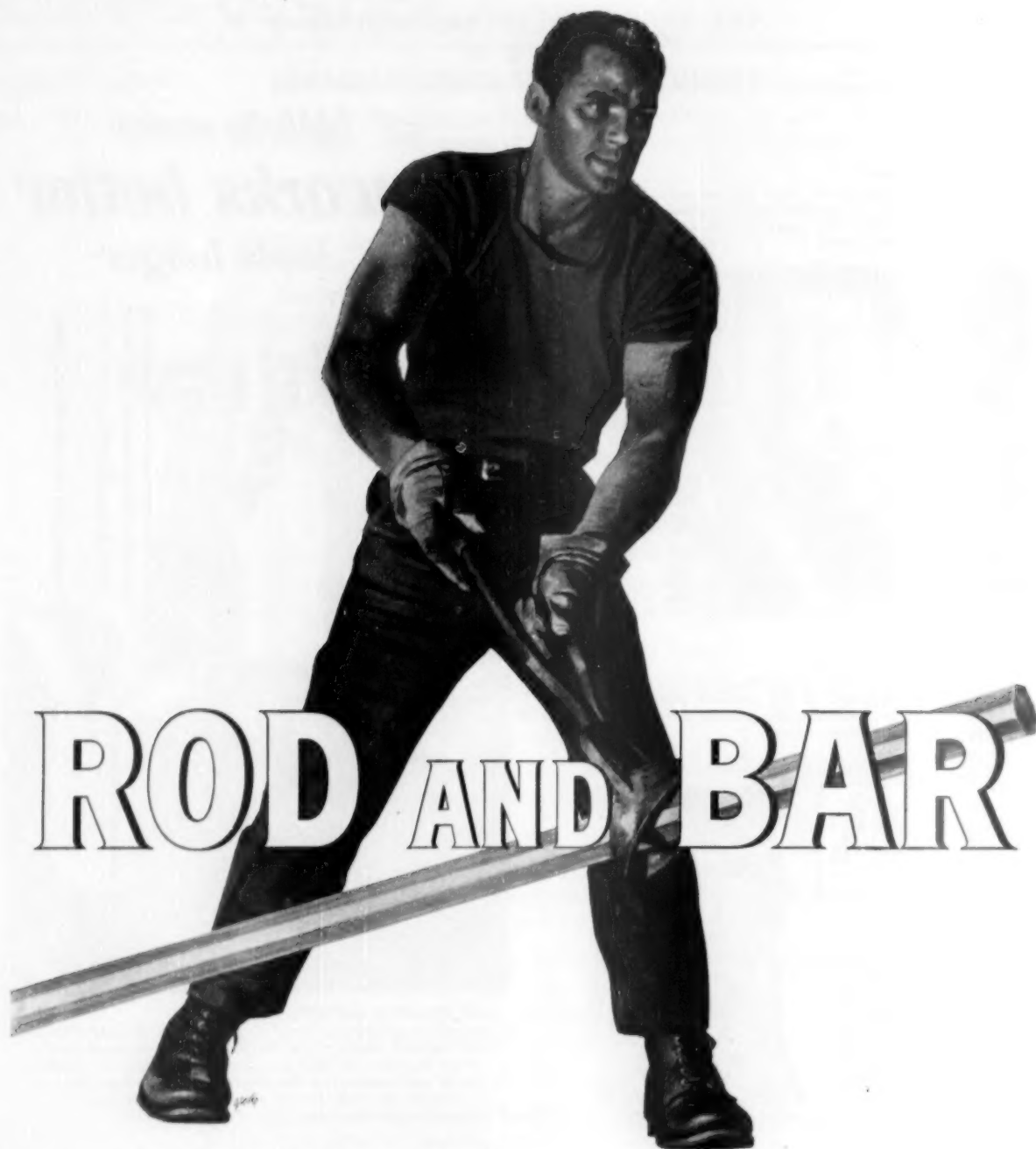
### Full three-phase protection...

Another Cutler-Hammer "first!" Now the widely demanded three-coil overload protection, so necessary to prevent single-phasing motor burn-outs, is here as an optional feature in standard starter constructions and enclosures. Complete 3-Phase protection...without the high cost of special starter assemblies or the many problems of cumbersome off-size enclosures.

Better performance is more than a mere claim in the spectacular new Cutler-Hammer ☆☆☆ Motor Control. Field tested for more than two years in hundreds of the most difficult jobs before it was ever released for sale. Compared with every make of control by actual users...to have most say, "Better than anything we have ever used." Loaded with new features, a few of which are described all too briefly above. Try it now! Order from your nearby Cutler-Hammer Authorized Distributor today. CUTLER-HAMMER, Inc., 1275 St. Paul Avenue, Milwaukee 1, Wisconsin.



# CUTLER-HAMMER ★ ★ ★ MOTOR CONTROL



**TO MEET THE NEEDS** of thousands of manufacturers, we have greatly increased the capacity of our rod and bar plant, and are continually adding to the range of sizes.

This is only part of our vast expansion. Before year's end we will have the capacity to produce close to 30% of all the aluminum made in this country. This will be two and one-half times as much as the whole industry produced prior to World War II.

We are proud to be the fastest growing major producer in an industry that is revolutionizing American manufacturing—and American living. Aluminum is taking the place of other materials in thousands and thousands of useful products—making these products better and cheaper.

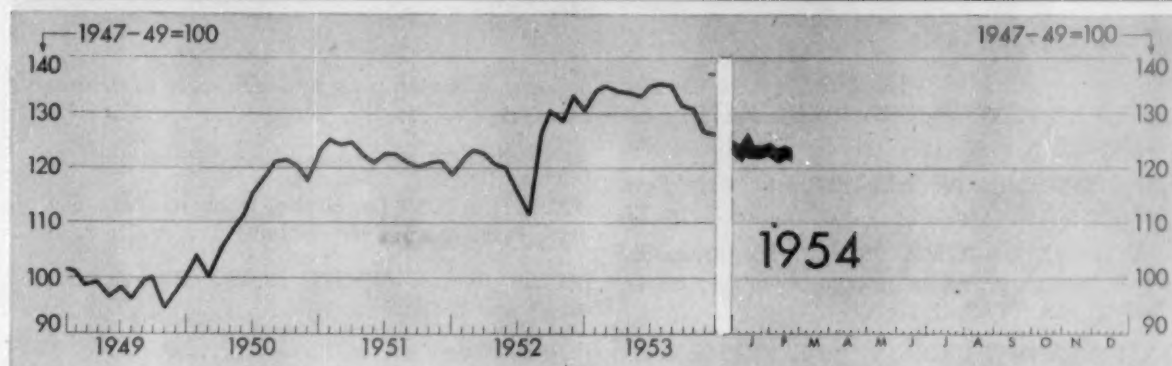
Because of aluminum, a brighter future lies ahead. We are continuing to expand—and to work with manufacturers to turn aluminum's unlimited opportunities into realities.

***Kaiser Aluminum***

**America's fastest growing major producer of aluminum**

KAISER ALUMINUM & CHEMICAL CORPORATION, OAKLAND, CALIF.

# FIGURES OF THE WEEK



**Business Week Index** (above) . . . . . \*123.6 †123.5 124.5 135.5 91.6

## PRODUCTION

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Steel ingot production (thousands of tons).....	1,730	†1,779	1,802	2,240	1,281
Production of automobiles and trucks.....	146,292	†142,097	146,741	161,860	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$33,330	\$30,954	\$31,930	\$44,479	\$17,083
Electric power output (millions of kilowatt-hours).....	8,551	8,684	8,976	8,196	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,320	6,322	6,292	6,543	4,751
Bituminous coal production (daily average, thousands of tons).....	1,266	1,306	1,363	1,392	1,745
Paperboard production (thousands of tons).....	232,388	237,563	243,978	238,981	167,269

## TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars).....	66	66	63	74	82
Carloadings: raw materials (daily av., thousands of cars).....	38	38	40	40	53
Department store sales (change from same week of preceding year).....	-1%	†-2%	-8%	+3%	+30%
Business failures (Dun and Bradstreet, number).....	215	277	208	176	22

## PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	424.6	422.5	418.3	410.4	311.9
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100).....	81.0	81.6	81.5	92.2	††73.2
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100).....	98.3	97.6	96.4	85.6	††75.4
Print cloth (spot and nearby, yd.).....	19.4¢	19.6¢	19.8¢	23.8¢	17.5¢
Finished steel, index (U. S. BLS, 1947-49 = 100).....	140.9	140.9	141.3	130.5	††76.4
Scrap steel composite (Iron Age, ton).....	\$24.33	\$25.33	\$27.67	\$44.00	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....	29.96¢	29.95¢	29.95¢	25.40¢	14.04¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.38	\$2.41	\$2.38	\$2.36	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	34.18¢	34.14¢	33.42¢	32.94¢	30.56¢
Wool tops (Boston, lb.).....	\$2.12	#	\$2.12	\$2.10	\$1.51

## FINANCE

90 stocks, price index (Standard & Poor's).....	205.6	206.3	206.0	204.2	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.59%	3.61%	3.69%	3.54%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2%	2%	2½	2½-2½	3-1%

## BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	54,198	54,789	56,090	53,771	††45,820
Total loans and investments, reporting member banks.....	79,893	79,868	79,838	78,014	††72,036
Commercial and agricultural loans, reporting member banks.....	22,569	22,556	22,686	22,881	††9,299
U. S. gov't guaranteed obligations held, reporting member banks.....	32,346	32,409	32,987	31,535	††49,879
Total federal reserve credit outstanding.....	25,897	25,815	26,412	25,648	23,883

## MONTHLY FIGURES OF THE WEEK

MONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Average
Exports (in millions)	December	\$1,349	\$1,244	\$1,391	\$812
Imports (in millions)	December	\$908	\$849	\$1,053	\$412

\* Preliminary, week ended Feb. 20, 1954.  
† Revised.

†† Estimate.  
‡ Insufficient trading to establish a price.

# Date for "Latest Week" on each series on request.



# in BUSINESS this WEEK...

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It marks a turning point in the direction of defense spending . . . .p. 28

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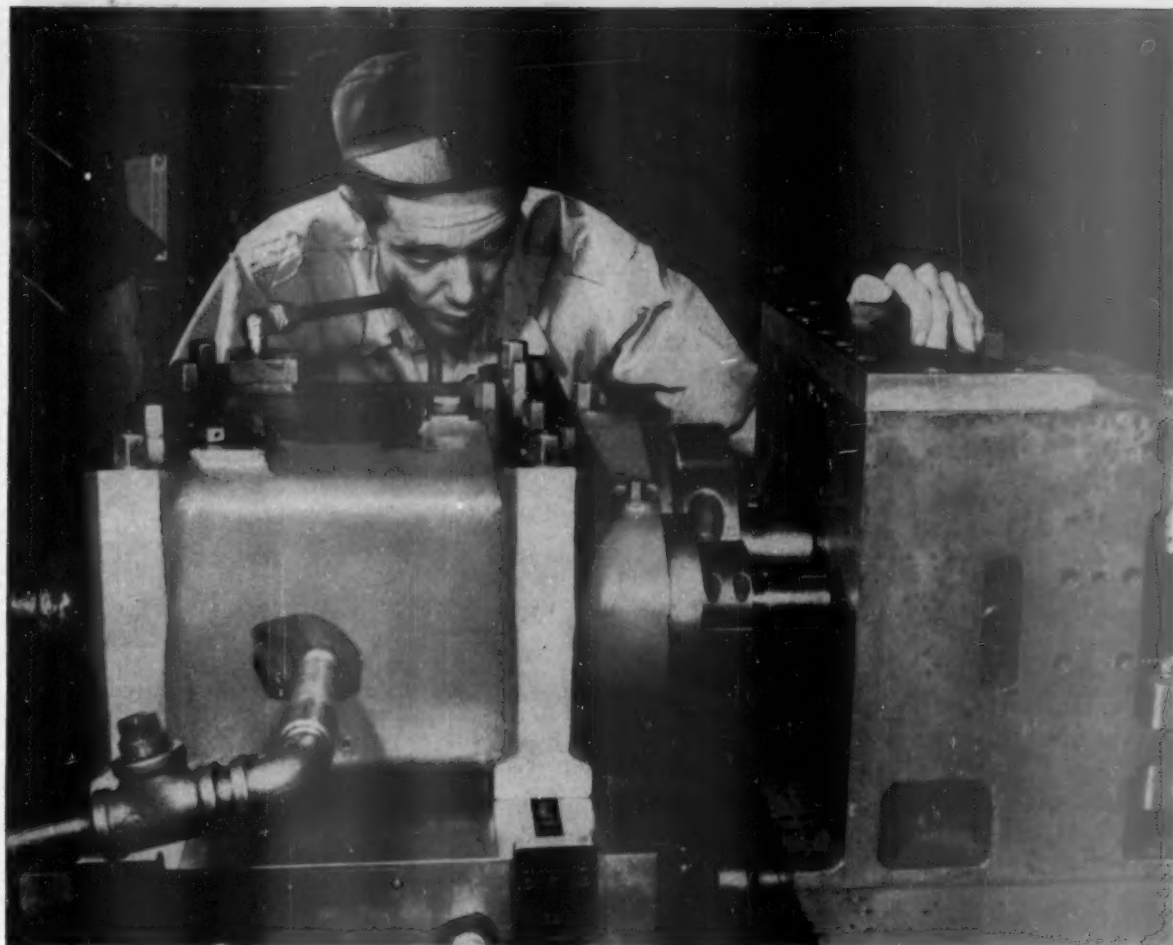
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## Cooled oil solves heat expansion problem in precision boring machine

... HELPS BUILD BETTER BULLDOZERS

The mighty bulldozer is just one of many heavy construction machines manufactured by the Bucyrus-Erie Company at its Evansville, Indiana, plant. But like so many products of American industry, the building of a bulldozer is no simple task. It demands close attention to every detail. And once again, modern refrigeration plays an important role.

For example, in the precision boring of two holes for the hydraulic-pump housing ... a unit that raises and lowers the heavy earth-moving blade of a bulldozer ... tolerances as low as .0005" are required. In this high-speed boring operation, heat expansion proved troublesome and serious. Temperatures ranged from 60° to 65° F. above the desired room temperature ... caused deviation from close tolerances. That meant dismantling the machine ... readjusting, modifying, testing and reassembling it. Production time was lost ... schedules disrupted ... overtime expense incurred.

To overcome heat expansion and to in-

sure accuracy, a *Frostrode* coolant cooler operated with a Du Pont "Freon"® fluorinated hydrocarbon refrigerant was installed. This supplies cooled oil in a constant flow through the headstock and spindle bearings. (Note oil-feed pipe at center of housing.) Temperature is now steadily maintained at the level found best for maximum precision. Delays are prevented, shutdowns eliminated, overtime avoided. The cooled oil saves production costs ... speeds the job ... aids in building better bulldozers.

"Freon" refrigerants are ideal for all types of industrial applications and cover a complete range of temperature and humidity conditions. They are safe ... nonflammable, nonexplosive, virtually nontoxic. Made to exacting specifications, they contribute to the long life and economical performance of large and small refrigeration systems. Discuss the subject with your engineers. It's quite possible they may suggest many new ways in which modern refrigeration

(and air conditioning) can better serve your own interests. Write for booklet: "How Air Conditioning and Refrigeration Benefit Industry." E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Division, Wilmington 98, Del.





# FREON

REG. U.S. PAT. OFF.  
SAFE REFRIGERANTS

\*Freon is Du Pont's registered trade-mark for its fluorinated hydrocarbon refrigerants.



BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY



Taking the wheel of Hudson Motor Car Co.'s "Italia," N. K. VanDerzee, V.P. in Charge of Sales, explains:

## How a new Hudson avoids traffic problems!

"Here is the new *Italia*—a look into the future and the latest member of the Hudson family which includes the Hornet, the Wasp, and the Jet," says N. K. VanDerzee.

"But new design naturally creates new traffic problems—in the factory. It's a big job to prevent parts shortages from stalling assembly lines. Air Express is a tremendous help.

"As our Traffic Department puts it: One phone call, and it's a load off our minds. Air Express delivers in a matter of hours. This dependable speed gives us the safety margin we need to keep production rolling. We handle about 2,500 lbs. a month by Air Express. Naturally, we're thinking about speed. But

our records show that most of our Air Express shipments also *cost less* than they would by any other air service!

"Add to this the country-wide coverage and Air Express' ability to pinpoint shipments in transit, and you have some idea of why our Traffic Department turns to Air Express for our most urgent traffic.

"We in Sales are proud of our reputation for on-time deliveries of new cars. In large part, we owe that reputation to our Traffic Department—and Air Express."

It pays to express yourself clearly. Say Air Express! Division of Railway Express Agency.



**GETS THERE FIRST** via U.S. Scheduled Airlines



## March: Business Upturn . . . or Else

● President Eisenhower himself has labeled March the crucial month for the economic trend.

● Poor reports on retail sales and unemployment could reopen Administration policy on tax relief, easier money, federal spending.

● Even now, however, some good news is coming in: steel orders up, unemployment claims and inventories down.

Last week, President Eisenhower juggled the timing and juggled the policies his Administration has laid out to meet the business downturn. He said that if March did not show a seasonal pickup, he would regard it as a signal to consider "a number of measures" to counter a slump.

This week came news that made a revamping of Administration economic policies all the more likely—a tremor in retail sales for January. It's only a slight dip in the official figures, but it came when there might well have been a rise due to income tax reduction on Jan. 1. What's more, it followed a similar small slide-off in December.

Continued strength in retail sales has been the heart of the Administration's cautiously confident view of the future. If retail sales should drop off steadily, the whole picture would change—and, with it, the package of tax reforms and spending cuts now before Congress with Administration blessing.

• **Secret Knowledge?**—Eisenhower had been well briefed on the importance of the spring upturn. So when a reporter asked about the business situation, he found it natural to talk about March as the crucial month.

This raised speculation along two lines with businessmen and politicians:

- Does the President know something the public doesn't know, and is he preparing them for it? The answer to this is no.

- Is there a grand design for anti-recession action, still under wraps but ready to go at a signal? Again, the answer is no.

- **Possible Moves**—There's nothing automatic about what the Administration would do if March raises more definite

alarms. But here are the moves being discussed:

- A broad income tax reduction for consumers, to take effect this spring. Washington is betting on this one.

- Another easing of the money supply.

- An increase of federal spending, no matter what Congress does about appropriations for fiscal 1955.

### I. Tax Relief

The big swing toward tax cuts for consumers has been evident not so much among Eisenhower's economic advisers as in Congress.

Eisenhower mentioned the possibility in his news conference, but he qualified it two ways. First, there would have to be a failure of the normal March pickup in employment. Second, tax reduction would be only one of several possible measures to be considered.

- **Undercurrents**—But Eisenhower left some of his advisers a little breathless with this offhand assessment of the near future. That's particularly true in the Treasury Dept., where opposition to further tax cuts is the strongest.

In Congress, the effect of his announcement was to collapse part of the opposition to consumer tax relief—which Democrats have been pushing for months. His own careful hedging was brushed aside.

- **Political Heat**—Democrats renewed their pressure—and Republicans like Sen. Charles E. Potter of Michigan began predicting tax cuts for individuals, no matter what happened in March.

Potter predicted adoption of something like Sen. Walter F. George's bill to increase personal exemptions from

\$600 to \$800 this year and to \$1,000 next year.

This would put something like \$5-billion of extra money in consumers' pockets this year, and an additional \$5-billion next year. Of course, it would also knock that much of a hole in the budget. The deficit would increase from the \$2.9-billion foreseen in the January budget message to practically \$8-billion.

- **Nothing Assured Yet**—It would be a mistake to think that the Administration has made up its mind about a consumer tax cut even if March fails to show an upturn.

The argument against such a cut goes like this: The minor dip in retail sales isn't enough to cause concern; consumers still have plenty of money to spend if they want to—look at savings, which have been going up as consumption has dropped. It's not shortage of money that is holding back consumption. Therefore, a good part of the extra money you would put in consumers' pockets by a tax cut might not be spent. You'd simply throw the budget further in the red, without any economic gain to show for it.

This thinking stems from the Treasury. There's a real possibility that, in threshing out a decision, the Administration will face a knock-down fight between the budget cutters—chiefly Treasury Secretary George Humphrey and Budget Director Joseph M. Dodge—and the Presidential advisers who favor quick and massive action to halt a downturn.

- **Ways & Means**—Even if consumer tax cuts are decided on, there will be an argument about method. For example, Humphrey is against an increase in exemptions, because this method relieves large groups of taxpayers from all income taxes.

Other Administration advisers oppose the exemption approach for another reason. If a tax reduction is recommended, they want it carried out swiftly and painlessly—with a minimum of debate and confusion in Congress. They seem to think that reducing rates would be simpler than raising exemptions. This group feels that the quicker consumers feel the effects, the more useful a tax reduction would be.

By either method, it would be difficult to reduce tax withholdings before

July's paychecks, assuming a recommendation by Apr. 15 and adoption almost without debate.

## II. Still Easier Money

For two weeks now, Wall Street has heard rumors that the Federal Reserve is going to reduce bank reserve requirements. A similar move was made last June.

The rumors have this much to them: Some of Eisenhower's economic experts have been recommending the move as a means of lowering interest rates in a few spots in the money market—primarily the 3½% rate on prime bank loans, and the mortgage rates in some parts of the country.

Officials at the Fed are close-mouthed, as usual. Their problem is whether to use the shotgun approach to easier money—by way of reduced reserve requirements—in order to hit a few such sticky places.

## III. Increased Spending

By concentrating on the significance of the inventory cutback, the Council of Economic Advisers tends to gloss over the federal government's spending cut of \$5-billion. This slash is only partly offset by an expected \$2.5-billion rise in state and local government outlays.

Federal Reserve officials, on the other hand, never fail to mention the net decline in government spending as one explanation of the downturn.

• **Can Prime Pump**—Actually, the Administration has made preliminary plans to close the gap quickly if March looks dour. By drawing on unexpended appropriations, administrative decisions alone could swing federal spending \$3-billion a year over the current rate.

The effect of such decisions would be felt mostly by the construction industry on projects that were slowed down a year ago by order of the Budget Bureau.

• **Elusive Soft Spots**—Beyond this, planning is stymied. Soft spots in the economy are in industries not readily stimulated by government spending. The construction industry—traditionally the easiest to boost in a hurry—is already thriving (BW—Feb. 6 '54, p33). On an FHA-insured mortgage, for example, the President has authority to cut the down-payment on a \$12,000 house from \$2,400 to \$600. But private housing is already rolling along at boom levels. Administration experts argue that to try to increase it would merely run up prices in an already healthy sector.

The same holds true for public works construction, which is running strong. Even if the Administration had a shelf of public works plans ready—which it doesn't—it would be reluctant to ask

Congress for the money, under the circumstances. An exception is road building, where the economic watchdogs see some slack. In a pinch, this program could be stepped up.

## IV. The Next 30 Days

Rumblings of more cheerful business news are reaching Washington, along with the bad news. Steel companies report a rise in new orders (page 30). Employment in the hard-pressed farm equipment industry seems now to have hit its low last October. Orders for new industrial machinery perked up in January after a four-month decline. Initial claims for unemployment insurance have dropped for the fifth consecutive week.

Most cheerful of all reports is a sharp decline in inventories, as yet not reflected in the official figures. Indications are that the drop for the first quarter will be around \$4-billion or \$5-billion on an annual rate. This follows a decline in fourth-quarter 1953 of close to \$3-billion, annual rate. If retail business stays firm, inventories could be back to a year-ago level six months from now. Then replacement orders would have to be placed.

• **No Easy Decision**—All this makes it plain that the decision Eisenhower charted for early April will be a tough one. The confusion over unemployment estimates doesn't help.

An experimental survey on unemployment indicated the possibility of a figure 728,000 higher than previously reported (BW—Feb. 20 '54, p29). That caused consternation among politically sensitive congressmen. But it didn't worry Administration insiders. In fact, they are privately counting on a sharp drop in unemployment estimates when the same survey is repeated in March.

One reason is that the new survey includes more rural areas, where employment is always low in the winter and always rises in the spring. So both the reduction in winter and the rise in the spring should be sharper in the new figures.

This expectation, of course, overloads Eisenhower's "wait for March" theme on the side of optimism—more than may be justified.

It leaves Eisenhower's experts concentrating pretty much on retail sales and their counterpart—inventories—as indications of what to recommend to the boss when the April showdown comes.



## Holiday Is Bargain Day at Hearn's

Washington's Birthday shoppers besieged New York City's 14th Street stores, came away with everything but the cherry tree. It looked as though Manhattan, which traditionally has closed shop Feb. 22, would take its cue from cities such as Washington, D.C., and make it a bargain day.

Focal point of Manhattan's bustle was Hearn's, big department store. Its ad for TV sets at \$6.95 and spring hats for 22¢ had customers fairly climbing counters.

Clement Conole, Hearn's president, had a special motive for the shindig: He was showing the values—on the average some 6% below usual—afforded by a new self-service setup.

But some customers grumbled the big bargains were few—only three TV sets for \$7, six cultured pearl necklaces for \$2.97. To this, Conole had two answers: The ads told how many items were available. And for disappointed customers, the store extended its sale for two more days.

# Businessmen Sniff the Troubled Air

● And find it much less troubled than you might expect. Few fear that the business dip will lead to hard times.

● Principal worry is over ways to meet increasingly sharp competition—how to hire or train harder-working salesmen and more dynamic business leaders.

● Another trouble spot is the profit margin, squeezed between high costs and falling sales.

People of other nations often enjoy a quiet chuckle over the allegedly immense American capacity for worry. Within the U.S. itself, it's a popular notion that the least placid-minded of all citizens are businessmen. If you put these two theories together, you come out with the conclusion that U.S. businessmen are the most worried people in the world.

This year, therefore—with the air full of jittery talk about a recession—you might reasonably expect U.S. businessmen to be in a frenzy of nervous apprehension. They aren't. BUSINESS WEEK reporters sampled the morale of all kinds of businessmen this week—executives of companies big and small, in almost all major industries, all over the country. They found one or two cases of insomnia and a few isolated chain smokers. But the overwhelming majority of business leaders, it turns out, still sleep peacefully at night, relax on weekends, and speak pleasantly to their wives and children.

• **Salesmen's Era**—"No executive here will say he is really worried," says a report from Dallas, Tex. "Nobody seems to feel the country is going to pot. Nobody seems notably concerned about the prospects for 1954."

Having made that point clear, the report touches on a theme that dominates business thinking from coast to coast: "If anything is worrying executives, it's keener competition."

That's the biggest general worry of businessmen today—though some companies have private worries, peculiar to their industries or competitive positions, that look a good deal more ominous. Actually, some businessmen refuse to elevate tightening competition to the status of a worry. It's an executive's job to fight competition, they say. Competition is not a worry, but a problem—just as the designing of a machine is a problem for an engineer.

• **Men Wanted**—But whatever you call it, tightening competition has caused many brows to wrinkle in executive offices during the past few weeks. When customers begin to pinch pennies dur-

ing a business dip—in the face of an actual or feared drop in earnings—the businesses serving those customers have to work hard to keep their own earnings up. This means a crying need for effective salesmen. Many companies report that salesmen—really hard-working ones—are painfully scarce.

"Fully 70% of our sales organization has had little or no experience in selling our products in a strong buyers' market," says a Chicago businessman. A Texas auto dealer is even more brutally positive. "We frankly wish a few more of our salesmen would ask to resign," he growls. "Some of them have sat around for five or six years, and have got in the habit of sitting."

"Get some good salesmen," says the president of a Tennessee furniture company, "and you've solved all other problems."

Other businessmen rank leadership just as high as salesmanship. "I wonder," a Cleveland executive mused this week, "if we have enough of the right kind of people in key positions—people who can inspire the rest of the organization." A Midwest businessman wondered, too, and came out with this unhappy conclusion: "We have been so concerned with expansion, with the physical aspects of our operations, that we haven't devoted sufficient time and effort to executive training."

"The problem is people," says a report from Boston, and sums the trouble up neatly. "They don't work so hard as they used to. There seems to be an atmosphere of self-contentment, of sitting back on luxuries."

• **Money**—Then there's that old problem of business, intensified now by high costs and falling sales—the profit margin. Listen to this enraged howl from Birmingham, Ala.: "It seems to us that nearly everything we buy is out of line with what we get for our products."

This complaint is heard throughout the land. Businessmen everywhere report a squeeze on the profit margin. Many fear that labor will make things tough by continuing to ask for higher pay—even though, so far, the indications

are that unions won't be unreasonable in their demands this year (BW—Feb. 20'54,p156). Other businessmen, hopefully eyeing Congress in its present tax-cutting mood, are ready to abandon the hope when they consider the possibility of higher state and city taxes. Any way you look at it, everything seems to pinch profits.

A report out of Portland, Ore., cites the case of an auto dealer who sold \$285,000 worth of cars last month and ended up with a net profit of \$153. That's a narrow margin in anybody's language.

• **Cost-Cutting**—In a period when competition is sharpening, a company can seldom seek a way out of the profit squeeze by raising prices. About the only way out is to cut costs. Businessmen are looking for ways to save.

"My big worry is how to mechanize and economize," a Minnesota department store executive told a BW reporter this week. "We're examining every possibility of saving a few dollars here, a few dollars there."

Often, you have to put out a heavy handful of money initially in order to enjoy long-run savings. Efficient machinery, for instance, means an investment of capital. Here's where many businessmen today are finding a source of acute frustration.

"Needed improvements are having to wait," says a report from Salt Lake City, "until the banks loosen up." You hear this story almost everywhere.

• **Inventories**—There's one more worry connected with the current business slide—a worry that springs from a growing jerkiness in movement of goods.

Customers today are buying goods only when they need them. Uncertain of the future, they don't want to risk stocking up on things they might not need, or might regret they had bought. This thinking marks the actions of both individual consumers and companies that buy from others.

The result (from Charlotte, N. C.): "We don't have any worthwhile forward bookings. Everything we get is a rush order."

"Customers don't want to carry big inventories," a steel executive explains, "but they want us to make almost immediate delivery of the things they buy. The buyer is the boss now. He wants us to carry his inventories for him."

This jerkiness makes forward planning difficult. It even complicates immediate planning of the kind that looks only a week or two ahead. Still, many companies afflicted with the trouble report that actual sales volume is holding up fairly steadily.



# New Fight on Public Power

Interior Dept.'s plan for marketing power from a Savannah River dam comes under attack from cooperatives and other public power advocates.

The Interior Dept. has finally decided how its Southeastern Power Administration will market electricity from Clark Hill Dam, new federal hydro project on the Savannah River.

The decision is sure to stir up controversy in Congress over private vs. public power. Lawsuits are threatened, too.

As a test of the Administration's attitude toward power, the fuss may well overshadow the theorizing about "selling the TVA." This issue is clear-cut; Clark Hill has been producing power only since July, and no precedents have yet been established. The Georgia Power Co., a privately owned utility, is the sole transmitter of power from the dam to public power customers in Georgia, though the interests of the co-ops and other public power users are supposed to be safeguarded by secondary contracts.

A new precedent would be set: For the first time, a private utility would be installed as sole buyer of federal dam electricity.

• **Shift from New Deal**—The proposed setup was foreshadowed when Georgia Power was named last July to take the Clark Hill Dam's output (now about 80,000 kw., with installed capacity for 280,000 kw.). The issue now is whether or not to make this arrangement permanent, with guarantees to preference customers written into the contracts.

Under the New Deal, policy was to build transmission lines at federal expense to deliver power to co-ops and other preference customers. Federal financing of transmission lines had tough sledding, though, even before the present Administration came in.

Congress has repeatedly voted that co-ops and the like have first right to federal electricity. The Eisenhower Administration says it won't interfere with that right—but that transmission lines shouldn't be built at federal expense. Interior argues that Georgia Power has the only transmission system ready to tap the Clark Hill power.

• **Co-ops Complain**—Electric cooperatives in Georgia say they'll go to court to fight Interior's plan. Despite the so-called guarantees of power at an attractive rate of 6.28 mills per kwh., they say they would be at the mercy of the Georgia Power Co. They question the validity of the guarantees as a binding contract.

Moreover, the co-ops complain, the

peak capacity—electricity used only in top consumption periods of the day—would go into the pot as part of Georgia Power's supply, instead of being reserved to the co-ops.

Interior contends that the co-ops will get electricity much cheaper than if transmission lines had to be built. And Georgia Power argues that it is providing a preferential rate to the co-ops in return for the "peaking" stand-by power any big system needs.

• **Procedure**—Fred G. Aandahl, Assistant Secretary of Interior, said the Clark Hill plan would involve three steps:

• The government would sell Georgia's share of Clark Hill output (half the annual output is reserved for South Carolina) to Georgia Power Co. for transmission to preference customers.

• It would then sign contracts with the co-ops guaranteeing them a pro rata share of Clark Hill power at a specified rate.

• Georgia Power would sign a contract with the preference customers, guaranteeing delivery of the government electricity, plus other power to be generated by the company.

• **Precedent**—Public power customers in other parts of the country are watching Clark Hill as a possible pattern for policy in their cases.

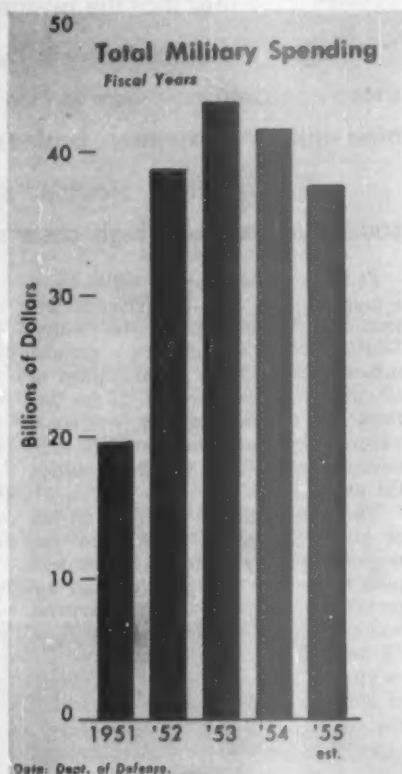
In the Southwest, the government has contracts with private utilities to deliver federal power to co-ops and municipal utilities—but only as carriers, not as suppliers. In the Missouri Valley, contracts between 12 electric companies and five co-ops have been stalled pending the Georgia decision. Also affected may be a government contract with Virginia Electric Power Co. as a carrier.

• **Politics**—Former Gov. Ellis Arnall of Georgia, already announced as a candidate for either governor or senator, has jumped in on the side of the Georgia co-ops. Georgia congressmen have always opposed such plans and are expected to oppose this.

Democrats feel they could hardly have better political ammunition in Georgia, the Southwest, and the Northwest, where local public power groups are potent. But Assistant Secretary Aandahl has the backing of Interior Secretary Douglas McKay, and McKay has the backing of the White House.

The battle will be fought out on those political lines.

1 Total military spending is slated for a big drop



## Defense's

Next year's military budget, now being hashed over in congressional committees, marks a turning point in the post-Korea buildup, and in the direction of defense spending (see chart, above).

• For the first time since 1951, the military budget is designed to equip the Army, Navy, and Air Force with something more than conventional World War II weapons.

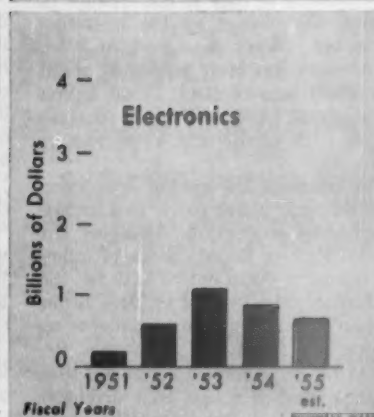
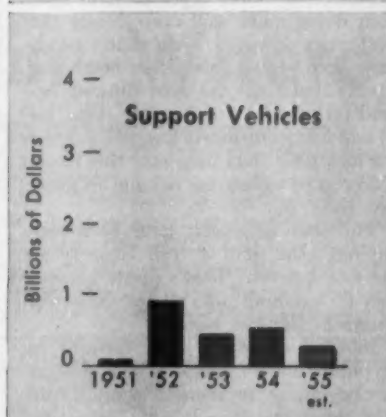
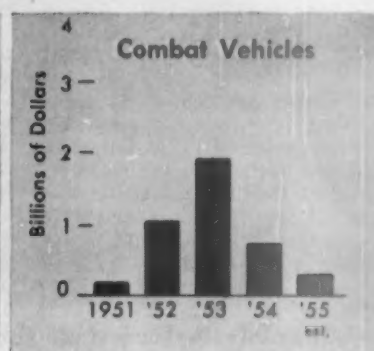
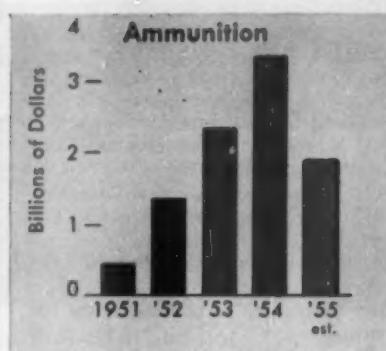
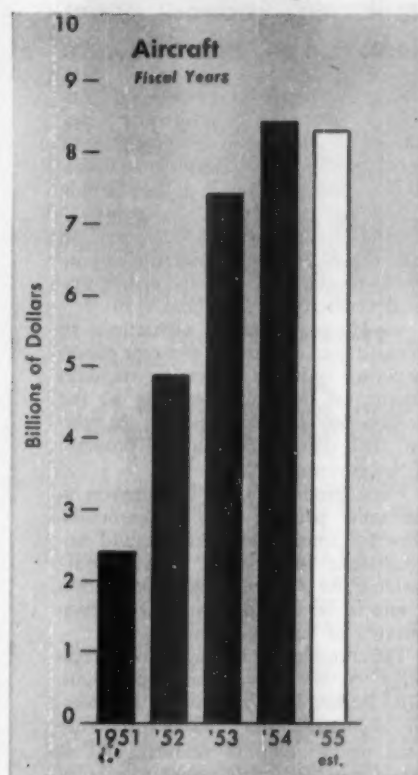
• At the same time, it marks a sharp drop in all but a few of the major items that the military buys.

• **New Weapons**—Procurement programs for the fiscal year 1955 are based on the military "new look" of Adm. Arthur W. Radford, chairman of the Joint Chiefs. Stated simply, that's a revision in tactics and strategy calculated to build all three services around new weapons—guided missiles, atomic artillery, supersonic planes, nuclear-powered ships—that have virtually reached the conventional stage.

The post-Korea habit of buying all kinds of weapons for all possible kinds of wars is out. Radford and the Na-

## 2 Aircraft procurement is scarcely touched

## 3 But just about everything else goes down



# New Look: How It Works Out

tional Security Council agree that if war comes, we'll fight with the weapons we have—not be controlled by what the enemy has or hasn't.

• **Less Money**—The immediate result of this will be a \$4-billion drop in total military spending in fiscal 1955 (which begins next July 1). Spending for fiscal 1954 (which ends June 30) is expected to hit around \$41.5-billion; for fiscal 1955, defense planners figure the ceiling at \$37.5-billion.

Assuming no new outbreaks, the downward trend will continue, leveling off in fiscal 1957 to about \$30-billion.

• **High Levels**—Even so, military contracting will go ahead at a rapid pace in the next fiscal year. The Defense Dept. will continue at or exceed present levels for aircraft, shipbuilding, guided missiles, and construction. It will cut back on other items.

The new budget will support an Army of 17 divisions and 18 regimental combat teams—two divisions less than at present. The Navy will be cut from 1,124 ships to 1,078 (losing mainly

support ships), and from 13,130 aircraft to 12,940. The Air Force will grow—from 21,000 planes in about 115 air wings to about 23,000 in 120 wings. The Marines will retain three divisions and three air wings.

Instead of buying a lot of new standard stock items, the services will live off inventories accumulated as a war reserve. Stocks will be replenished when needed.

Manpower in uniform under the 1955 budget will be about 3.2-million men—a drop of over 400,000.

• **Hard Goods**—If Congress O.K.'s the military's plans, the total figure for major procurement and production—military hard goods—will be about \$14.8-billion for fiscal 1955. That's about \$2.5-billion less than the expected \$17.3-billion for fiscal 1954—the peak of the current build-up and more than four times the \$4-billion figure back in fiscal 1951.

For aircraft and related procurement, fiscal 1955 spending is expected to hold up slightly under \$800-million a month

—or approximately the current rate.

Plans for the next three years call for hiking the total number of aircraft to over 50,000—an increase of more than 7,000 planes. More jets are also in the cards: The aim is to have more than half the total in jets, as against one-third at present.

Shipbuilding gets a shot in the arm: some \$990-million in 1955 for Navy construction and conversion to prevent too rapid obsolescence, and more than \$1-billion more in 1955 and later, most of it presumably for destroyers and destroyer escorts.

Next month, the Pentagon will send to Congress detailed estimates for new construction projects totaling \$1.1-billion. For such projects already started, the military expects to spend about \$1.6-billion in fiscal 1955. Reason for the big construction program is that work is still a long way from completed on air bases, antiaircraft and radar sites geared to meet the needs of the expanding Air Force and defense warning systems.

## Buyers Back

After a long dearth of orders, steel mill men report sales are picking up. Some expect things will get better.

Steel orders are coming in again. They were mighty scarce at most mills in the last quarter of 1953. But, some time in the past few weeks, buyers began to come back into the market.

One mill man after another reported this week that he had noticed a pickup in orders. A couple said they had been conscious of the sales revival ever since mid-January.

• **End of a Period**—The volume of business involved to date is not enough to warrant any change in the operating rate as yet. Week after week in 1954, the industry has been producing about 1.7-million tons of steel. That figures out at about 80% of 1953 rated capacity, or 75% of the new 1954 capacity figure.

The relatively low level of steel operations this year is due partly to a decline in industrial production. However, the Federal Reserve Board's index of industrial output is down only 8% so far. So the further drop in steel to 20% below last year's peak operations was due to reduction of inflated steel inventories. Return of buyers to the market at this time is interpreted as a sign that inventory liquidation has just about run its course for industry's basic metal.

• **Optimists**—Two companies say their new order volume is equal to roughly 50% of their peak production last year, after several weeks of climbing upward. The tonnage bookings are improving daily, too.

Another steel man says he's optimistic enough to believe that there will be a basic improvement by the middle of March, and that the second quarter of 1954 definitely will be better than the first.

One other steel chief says the next few weeks should see quite a change. He figures that there will be a pickup in March and April, not only in orders but also in production.

• **Earlier Guess**—This fairly optimistic view was the common opinion in the industry late last year, as sales people tried to figure out what was going to happen to them this year.

However, the results have not been so good in the first two months as they had anticipated.

Auto business was counted on for a lot more volume. As 1954 models came out, the word out of Detroit was that first-quarter passenger car production would run well ahead of last year. Actual production to date shows that

things did not pan out that way. Ford Motor Co. and General Motors Corp. have been going at a good clip. But Chrysler Corp. and the independents have done much less than expected. As a result, delivery holdups and order cutbacks have been streaming in.

Auto companies were not alone in holding back on steel: Almost every steel consumer seemed to be living on inventories. Just about everyone is now convinced that steel production is running behind steel consumption, and that the difference between the two, of course, is inventory reduction. Resumption of buying during the past few weeks has been, probably, to fill up depleted stocks of certain steel products and thus restore inventory balance. Later buying should be more across the board.

• **Panorama**—Some types of steel have been doing quite well even during the steel order drought. Oil country goods have been strong, and there are some reports that mills are even running behind on scheduled deliveries. Pipe for oil and other customers has sold in good volume. One steel man said this week: "More pipe orders are coming in every day, too."

Tin plate producers have been rolling out that item at full capacity in the first quarter. That's partly because they're catching up in the wake of strikes in the can business.

Jobbers' stocks are now thought to be pulled down enough so that jobbers are beginning to reorder again. And wire products are showing sales improvement after a sizable letdown.

• **Still Spending**—Steel men have not shown signs of being upset because business had fallen off from peak capacity production. They have been saying "It's off, but it will be back. And we're still spending on plant."

And they are. Iron and steel companies spent over \$1-billion to expand and improve their plants last year. According to estimates by the companies at the start of this year, an investment of approximately \$775-million will be made during 1954.

More new furnaces are among the projects being built this year. About 800 coke ovens will be built or rebuilt. Other projects include stainless steel rolling equipment, a wire rod mill, plate mill facilities, expansion of wide flange beams and other structural steel capacity, and a new tandem cold rolling mill.

The planned outlay for steel expansion and improvement in 1954 will increase the postwar investment to almost \$6.4-billion.

Only three years in the 1946-53 period saw capital expenditures go over the billion dollar mark—\$1-billion in 1953, \$1.17-billion in 1952, and \$1.04-billion in 1951.

## Private Atom

Eisenhower urges changing law to give industry a break on nuclear power plants and on related patents.

President Eisenhower has urged Congress to give private industry a wider role in the peacetime development of atomic power. The President's recommendations for amending the Atomic Energy Act have two general points:

• He wants private industry to have the right to own and use atomic power plants, and the fissionable material necessary to run them.

• He wants patent restrictions to be eased gradually over a five-year period to permit industry to acquire standard patents on inventions relating to the development of nuclear power. At present, such patents become the property of the government.

These proposals went to Congress in the same package with recommendations for sharing weapons-use and nuclear-power information with friendly nations. As a result, legislative action is sure to be slowed down in the cross-currents of varying opinions.

The President's message gave precedence to the international proposals. Now leaders in Congress are considering separating the various proposals. This would simplify matters, but it would not necessarily assure passage of the domestic program, which may never get around to action at this probably short election year session.

• **Scant Zeal**—There is little opposition to the domestic program, but there is also little zeal to push it through. Main foes of the plan are public power and labor groups that want the government to maintain its monopoly in the atomic power field.

Hitherto, industry has been reluctant to sink much money in building an atomic power plant, in the face of unknown economies and legislative restrictions. However, in recent weeks a number of utilities have offered to participate in building and running the Atomic Energy Commission's first utility-sized nuclear plant. This plant, now on the drawing boards at Westinghouse Electric Corp., is scheduled for completion in three or four years at an estimated cost of around \$45-million (BW—Dec 12'53, p36).

Industry may also get a shot at one or more smaller nuclear plants. The Dept. of the Army is known to be interested in a so-called package reactor producing some 20,000 kw. for one of its big installations. That's about the same as the power plant for the atomic submarine Nautilus.





Edén's Rolls Royce . . . Bidault's Cadillac . . . Molotov's Zis . . . Dulles' Cadillac

## After Berlin—Where Now?

Most of what happened at the Big Four meeting in Berlin is now on the record. But it's still too soon to make any final reckoning of what Berlin really meant. You won't know until after the Five Power conference, including Red China, which will be held in Geneva late in April.

That's because Geneva is a follow-up to Berlin—just as Berlin was a follow-up to the Korean truce. At Geneva, East-West negotiations can finally be put on a global basis—as they must be if the cold war is to be liquidated.

What happens next depends a lot on:

- How the post-Stalin political and economic pressures develop in Russia (page 142).

- How well the West manages to develop its economic and military strength and maintain its political unity.

- **Three Goals**—At Berlin, the West got everything out of the conference that Secretary of State Dulles had figured on. The last thing Dulles expected was to end the cold war in one East-West confab. He had three goals. And he achieved all of them to a remarkable degree:

- He proved the impossibility of reaching any European settlement with Russia until West Germany is rearmend.

- He showed that there is no shortcut to an East-West settlement via the kind of top-level talks Churchill proposed last year.

- He consolidated the Western alliance in direct diplomatic combat with Molotov.

- **Tension Off**—At the same time, Berlin did relax cold war tensions in Europe. Both sides demonstrated unmistakably that they wanted to ease off. There's some possibility that an East-West agreement can now be reached to weaken the Iron Curtain in

Germany a little—more trade, more freedom of travel, limited cultural exchanges.

The Geneva meetings will show whether the Communists also want a relaxation of the cold war in Asia. It may take several months, but you will get the answer to that question in the way Molotov and Chinese Foreign Minister Chou En-lai handle (1) a Korean settlement and (2) the war in Indo-China.

### I. Chances of Agreement

The betting in Washington now is that Geneva will fail to unify Korea but that an agreement will be reached to formalize the present truce. There will be no renewal of the war in Korea.

Indo-China will be a different matter. There's some feeling in Washington that Molotov may want a deal there. He doesn't want the U.S. to get so involved that a full-scale Asian war becomes inevitable—and the fact is that, by agreeing to discuss Indo-China with Peking and Moscow, the U.S. has almost taken on the position of a co-belligerent in that war. Certainly the U.S. will be in that position if the Geneva talks produce no results at all.

But getting a settlement in Indo-China will be a long-drawn-out business at best—perhaps as difficult as it was to get a truce in Korea. And that took from June, 1951, to August, 1953, with plenty of fighting in the interval.

- **Our Ad**—Dulles has one big advantage in dickering over Indo-China. Moscow and Peking are not seeking the same things from a deal. Peking wants admission to the United Nations. Moscow wants to exchange a promise of peace in Indo-China for a French veto of the European Defense Community.

That gives Dulles room to maneuver. The U.S. won't recognize Peking diplomatically, either during or after Geneva. But Red China's admission to the U.N. is something else again. Although we don't have full control over that, it might be possible for Dulles to use what say we have as a weapon to achieve U.S. aims at Geneva. For example, Dulles might soften U.S. opposition to U.N. membership for Peking if Chou En-lai negotiates in good faith for a real peace in Indo-China.

- **Paris Delay**—Meanwhile, of course, there's bound to be a delay in ratification of EDC. The parliamentary balance in Paris pro and con is now so even that Bidault won't have much chance of getting a vote on EDC until the Geneva meeting has at least taken up the Indo-Chinese problem.

Balancing off EDC against Indo-China is just what Molotov wants. But it's not likely he can actually block EDC by offering the French a deal in Indo-China. The chances have improved since Berlin that France will ratify the European Army Treaty by summer at the latest.

That's assuming that moves now planned by Washington and London go through successfully. Two of these planned moves are at the political level and one at the economic:

- To calm French fears of German military domination, the British are now ready to sign a treaty that would link Britain closely to the joint European army both politically and militarily.

- Washington is considering some new guarantee to the French that the U.S. will not walk out on France once EDC gets going.

- Dulles has agreed that the U.S. will help bolster up the Schuman Coal-Steel community, which takes in the

six nations involved in EDC. Apparently there's a plan to extend credits to the Pool High Authority. The money would come from the U.S. government and the World Bank. These loans plus what the High Authority could borrow in Europe might amount to \$500-million.

## II. Eisenhower's Terms

To get perspective on what Berlin plus Geneva might add up to, it's worth recalling the conditions for an East-West settlement that President Eisenhower laid down soon after he took office:

- An end to the Korean war.
- A settlement in Indo-China.
- An Austrian peace treaty.
- Free elections in Eastern Europe

(since limited to free elections in East Germany).

Eisenhower's first two conditions involved the end of actual fighting. And at Geneva, or as a result of this conference, it's almost certain that the Korean war will be liquidated for good. If a truce is also reached in Indo-China this would bring a liquidation of one more phase of the cold war.

The President's two other conditions require a Soviet retreat—in effect, a roll-back. Neither of these is likely to come soon. Certainly not free elections in East Germany. There's a real possibility that even these will come in time—but only on two assumptions:

- That the West stays strong. That means German rearmament via EDC, or at least in agreement with France. It also means that the growing Communist threat to Italy must be checked, even if that involves a new infusion of U.S. economic aid.

- That Russia's own political and economic troubles continue, so that Moscow can no longer afford to hold East Germany in the face of a strong and prosperous Western Europe.

## Pan-Am, RCA Take Over Missile Test Range

Pan-American Airways and Radio Corp. of America have taken over the job of running the Pentagon's fabulous guided missile test range that runs from Florida down across the islands of the Caribbean.

Civilian technicians from Pan-Am and RCA, as a sub-contractor on the electronic gear, have been taking over gradually for some months now. Sometime next month, the companies hope to assume prime responsibility for operating the center.

The range actually is a government-built shooting gallery—an electronic

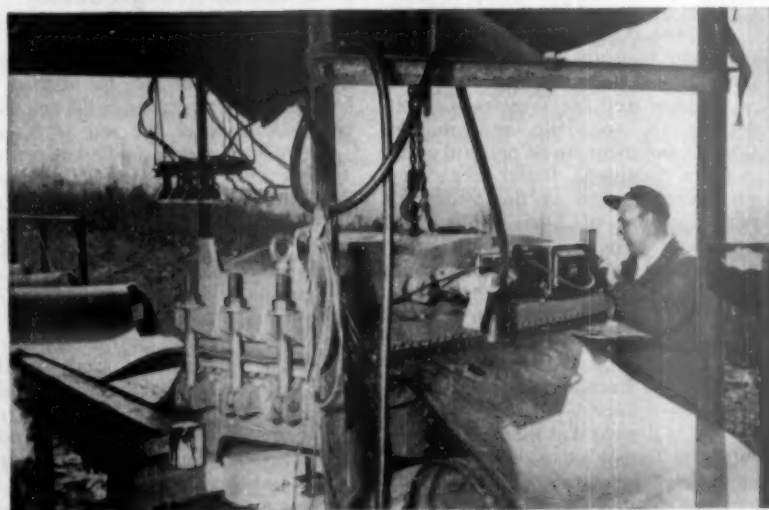
marvel where makers of surface-to-surface missiles can test their craft, and Air Force guided missile squadrons can check out their skill (page 78). It consists of launching platforms and control buildings at Cape Canaveral, about halfway down the coast of Florida, plus additional control and recording stations running in a straight line down through the Bahamas, Dominican Republic,

and Puerto Rico. When construction is complete missile makers will have all the facilities to shoot and fly their birds back and forth over a 1,000-mi. range—with completely interconnected control and tracking stations about every 200 miles.

When completed, the range will be probably the biggest military testing station operated by a private contractor.



Longest Open-Air Belt Conveyor . . .



. . . Has Its Own Portable Vulcanizer

B. F. Goodrich Co. installed the 4½-mi. rubber belt (upper picture) that carries coal to the Ohio Power Co.'s new plant near Beverly, Ohio. Goodrich set up a portable vulcanizer (lower) in the hills of southwestern Ohio to splice the 9,000-lb. rolls of rubber belt-

ing that were used. The beltroad is the world's longest overland open-air permanent rubber conveyor. Loaded, it can cruise up the hill shown in the upper picture at 600 ft. per min., while the automobile beside it will have to shift into low to make the grade.



As part of a continuing national expansion program, Ryerson has just opened this new plant opposite the Wisconsin State Fair Grounds in Milwaukee. Its big spans are more than 900 feet long. Exterior walls are sheathed in lustrous stainless steel.

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## BUSINESS BRIEFS

"Amicable settlement" has been reached between Kaiser Motors Corp. and the Cleveland investment banking house of Otis & Co. The fight started in 1948 when Otis withdrew from an agreement to market Kaiser securities; Kaiser sued for \$7-million. Still pending are SEC investigations of the role in the affair of the Otis firm and its leading figure, Cyrus Eaton.

... And new champion. Metropolitan Life Insurance Co. has become the world's largest private enterprise. In 1953, its assets passed \$12-billion, topping the almost \$11.8-billion of AT&T, which falls to second place. Met policies now cover over 37-million people; 1953 sales were a record \$4.1-billion.

Labrador iron mines are now linked to the Quebec port of Seven Islands by 360 mi. of completed steel rails, though 130 mi. of the main line remain to be ballasted. Tracks of the Quebec, North Shore & Labrador will probably be ready for full ore traffic in five months.

Hazel Bishop (BW-Mar.17'51,p.42), who founded a cosmetic company that last year racked up sales of better than \$10-million, backed out of the business — for \$310,000 in cash. The settlement ended her two-year "mismanagement" suit against ad man Raymond Spector, now owner of 92% of the stock in Hazel Bishop, Inc. Miss Bishop agreed to sever all relations with the company, sell her remaining stock (about 8%) to it.

Happy days in 1953 found several major companies setting high marks. . . . Douglas Aircraft earned \$15.46 a share, with volume up 67%, and a \$2.2-billion order backlog. . . . Union Carbide & Carbon sales topped \$1-billion for the first time, per share earnings rose from \$3.41 to \$3.55. . . . Goodyear Tire & Rubber set records with sales of \$1.2-billion-plus, earnings of over \$49-million. . . . C.I.T. Financial Corp. earned nearly \$34.8-million, a rise of 17.5% over 1952. . . . The Bell System's earnings also rose to \$11.71 per share; but AT&T president Cleo F. Craig said the company would continue to clamor for higher rates.

"Show restraint" in producing gasoline is the warning of chairman Ernest Thompson of the Texas Railroad Commission to oil refiners. He added: "We are long on gasoline, very long." Stocks were at 176-million bbl. on Feb. 13; that's 4-million bbl. above the previous week, 21-million bbl. higher than a year ago.

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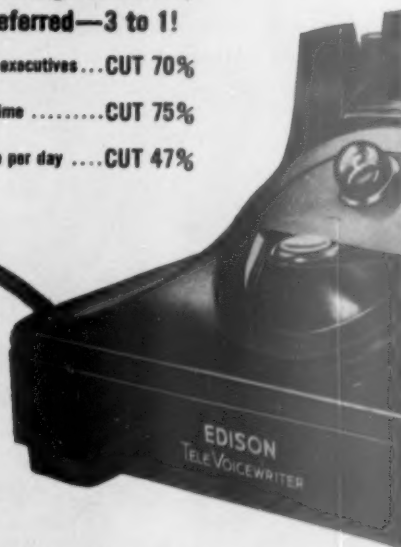
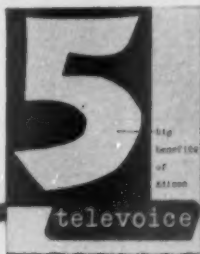
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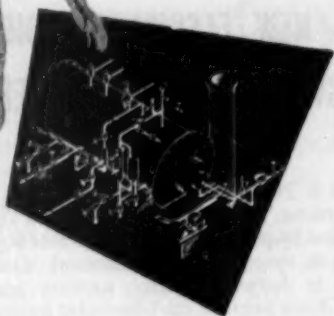
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The vast piping networks threading modern industrial structures are comparable to the circulatory system of the human body. But in these "arteries of industry," a rapid pulse and higher pressures denote progress, not decline. Every development in processing technology, every rise in productivity brings a parallel advance in piping systems engineered for the task. They keep pace, in complexity and capacity, with mounting loads.

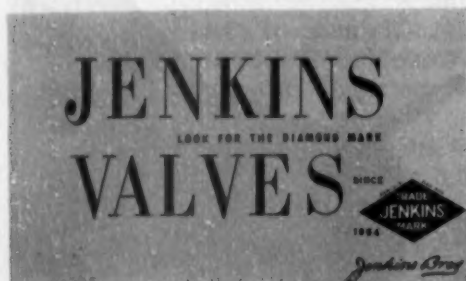
**Valves** to control the coursing fluids in these industrial arteries must be chosen with due regard for new-day demands. The penalty for valve trouble, in lost production and high maintenance, increases directly with complexity of modern installations.

If piping systems could be seen, as in the Jenkins Scale Model Power Plant illustrated, or in the "wall-less" structures now increasing in petro-chemical plants, their importance would be better realized. Since they are usually concealed, their major influence

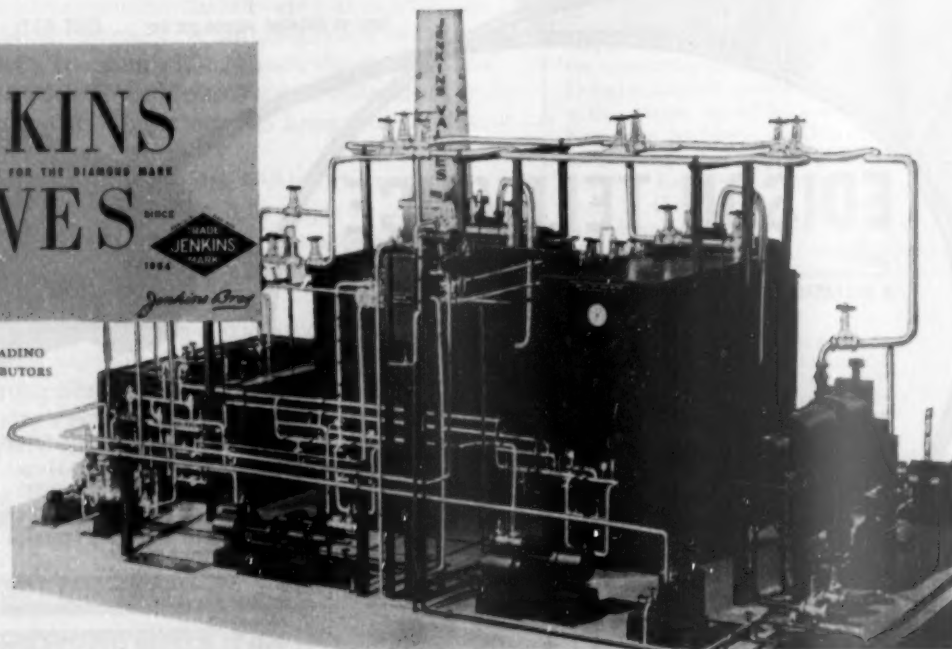
on successful operation is often overlooked.

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# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
FEB. 27, 1954



**Politics, more than economics, will set your tax bill.** Odds are good that you will pay less in taxes this year than you figured six weeks ago, when Eisenhower's program went to Congress. The picture:

Eisenhower's economists are uncertain on what to do (page 25). They still expect a spring pickup in business. If it shows, they will stand by earlier plans, designed to encourage expansion and modernization of production facilities. If it doesn't, they will switch, and add cuts to boost retail sales.

But the politicians are certain—politicians in both the big parties. Elections in November will determine who controls the House and the Senate. So, the politicians are out for bigger cuts. Members of both parties buy the idea that business should be encouraged to take risks, produce, make jobs. But the business vote is small, vastly outnumbered by the votes of workers, whether wage or salary. These workers are the ultimate consumers of goods and services. The big push now is to court them, by cutting their taxes.

—•—

There's criticism of Eisenhower on the tax issue. If you had heard him at that press conference when he talked about business and cuts in taxes, your impression would have been something short of the big black headlines. In reply to questions, he simply said that if employment fails to rise in March, then other tax measures might need to be considered.

The headlines played to the opposition. Eisenhower had been briefed by his advisers on what the spring trend should be. And he had been told when the economic report was put together in December that a steady decline in business would require other steps. He so reported to Congress in January.

The political complication is this: Eisenhower's tax revision bill, now about \$1.5-billion, didn't go so far as many members of his own party wanted it to go. The Democrats attacked it as favoritism to business and set out to get big savings for individual income taxpayers, on the grounds they are needed to boost consumption. Republicans backed the President. If he makes a switch, it will be hard to convince the voters it was policy, and not a maneuver forced by the Democrats.

There's an intra-Administration struggle on the issue. Opponents of further tax cuts include Treasury Secretary George Humphrey and his assistants, Marion Folsom and W. Randolph Burgess. Budget boss Joseph M. Dodge also is in this camp. Their idea is that we should wait and see what's ahead. The federal deficit is high in their minds. They helped sweat the deficit down from \$9-billion in fiscal 1953, Truman's last full year, to an estimated \$3.3-billion this year and \$2.9-billion for the year starting July 1.

A point to remember as the tax debate gets hotter: The division on the House Ways & Means Committee is 15 Republicans to 10 Democrats. The Democrats are plugging consumer tax cuts—lower taxes on individuals, lower excises on goods and services. So far, Republicans have held fast. But at least three Republicans have bills in to cut taxes on individuals. They are Richard M. Simpson of Pennsylvania, Noah M. Mason of Illinois, and

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
FEB. 27, 1954

James B. Utt of California. Chairman Daniel A. Reed, of New York, makes no bones about wanting a big cut.

There's real pressure on the GOP to outdo the Democrats and seize the initiative. If the White House delays making up its mind, it may find itself trying to climb on the wagon. Sen. Walter George, of Georgia, already has the Democrats on record for cuts to individuals.

Official Washington still expects good business. Fingers are crossed, of course. But arguments against a tailspin are easy to find.

The optimism rests largely on the rate of spending. Federal spending is declining. But state and local is up. Private capital will set a record this quarter in outlays for new industrial facilities. General construction still is on a boom. Retail customers cut their spending in December and January, but it shows no sign of plunging. Inventories are being worked down, at a faster rate this quarter than last year. In short, this is a "disciplined adjustment."

The unanswered question: With the economy so strong, why do producers continue to trim? Washington has no ready answer on that. But it leans to the side that production will firm up within six months. Steel orders are rising now (page 30). And unit sales of used cars picked up this month—a healthy sign for Detroit.

Federal electric power marketing agencies are being reorganized along business lines. It's part of Eisenhower's power policy.

Southwest Power Administration is now getting a real going-over. This is the agency created by the Democrats to sell government-produced power in Texas, Oklahoma, Arkansas, Missouri, and Louisiana. A survey team made up of two outside electric utility men and one government man has gone over the agency's organization. The result: payroll cut from 256 positions to 86. On top of that, Southwest's Washington office is being closed. This was a so-called "embassy," used to lobby for public power.

Democrats are picking flexible farm price supports as a top issue.

National chairman Stephen Mitchell is advising farm state Democrats seeking reelection, and Democrats seeking to unseat Republicans, to play this hard. There's considerable evidence that farmers prefer supports at 90% of parity, even with tight production controls, to lower, flexible supports with less Washington control over what is to be produced.

An Iowa state college survey throws some light. A sampling was made in Iowa and part of Illinois. More corn farmers favored today's program with 90% supports than any other—even with a 25% cut in the acreage they can plant. There was a disagreement in areas where livestock is a big part of farm operations. While these farmers leaned away from high grain price supports, they strongly backed support of livestock and livestock-product prices.

Public opinion polling is on the rise today as a guide for congressmen. Some 130 members of the House, many from closely contested districts, have given up trying to play their politics by ear. They are polling their constituents on politically important issues—taxes, farm program, foreign policy. They don't always follow the poll results in voting on the major issues. But they feel the polls are good public relations—the technique makes the voters feel that they have a say in what their representative does.



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echoed noise is**



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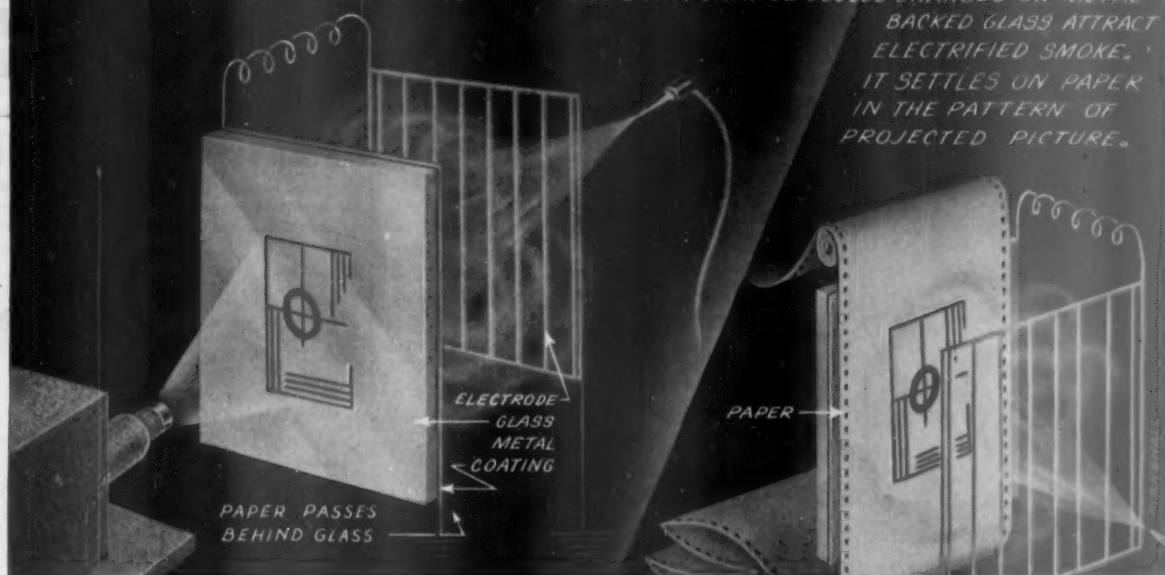
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THE PICTURE IMAGE IS PROJECTED ONTO METAL-BACKED GLASS WHICH MAKES A PATTERN OF ELECTRIC CHARGES ...

... THE SMOKE OF VAPORIZED INK PASSES THROUGH ELECTRODE WHICH GIVES IT A CHARGE ...

CHARGES ON METAL-BACKED GLASS ATTRACT ELECTRIFIED SMOKE. IT SETTLES ON PAPER IN THE PATTERN OF PROJECTED PICTURE.



## Standard Register's Electronic Find

A few weeks ago a Standard Register Co. truck carted a package about the size of a newsstand across Dayton, Ohio, to the Wright-Patterson Air Force Base. Inside was a machine that's news for the printing industry—a printer that substitutes electronic principles for the mechanical press. Standard has dubbed it a smoke printer and officially christened it the Photronic Reproducer.

After months of keeping mum, Standard now is willing to say a mouthful: that the smoke printer could revolutionize the entire printing industry—and open new vistas in the paper making and business machine fields.

• **Workings**—In smoke printing, a microfilm image projected on glass with a metallic coating forms an invisible pattern of electric charges. In front of the coating is paper. An electrified mist—of smoke, a dye, or particles of pigment—settles on the paper in the pattern of the image.

• **Faster and Cheaper**—The Air Force is using the first smoke printer to reproduce engineering drawings. It can handle about the same kind of jobs as a mimeograph or a photostat setup. But Standard claims it has an edge over those methods on four counts:

• **It's fast.** The first model can make 60 8½x11-in. prints a minute and future models may be a lot speedier than that.

• **It's cheaper** than processes that require photosensitized paper, will print on any kind.

• **It's versatile.** It can print from either a positive or a negative. Moreover, in the future Standard expects to turn out some versions designed to print from material on plain paper instead of film.

• **It's easy to operate.** All the operator does is turn two knobs and push a button.

• **Big Plans**—But Standard has no intention of stopping at this relatively minor phase of printing. It's planning bigger models that will compete directly with the lithograph and letterpress. Standard predicts that they will be far lighter in weight, faster, and cheaper. What's more, they'll turn out sharper prints, more faithful reproductions, says Kenneth Morse, executive vice-president of Standard.

• **Open Doors**—Standard will tell you frankly that it still has a long way to go, that present quality of the reproducer is far from perfect. But that

hasn't stopped the Air Force, which paid \$10,000 for the printer, from ordering six more. Morse hopes to hit the commercial market within a year.

Once it gets rolling, Morse thinks the printer will make some big ripples outside the printing field. Standard is already tinkering with electronic depositing for coating paper with carbon. It seems to control carbon thickness better than anything yet. If it can do that, it could handle other coatings. The same principle might even control the way paper fibers are arranged in manufacturing to improve paper stability—a whole new approach. And there's the angle that it could print on cloth.

The prospect that excites Morse most, though, is what the smoke printer may be able to do for electronic brains. Computers now turn out results a lot faster than they can be set down, don't print answers directly on paper. The Photronic Reproducer may eventually provide a method for printing answers as fast as an electronic brain thinks.

• **Out of Smoke**—Of course, it will take a lot of developing before Morse's big ideas harden into realities. So far Standard has laid out about \$500,000

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bang...bang...  
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for research on the first unit. Morse first got interested when a friend of his, William C. Huebner, a pioneer in the photocomposing and reproduction field, thought he saw something important in a puff of smoke. Huebner was experimenting in his Mamaroneck (N. Y.) laboratories with a pet project, a "jumping ink" press that transfers ink from plate to paper electrically, with no physical contact. As he stepped up the voltage and moved the paper, there was a burst of flame. Afterward, Huebner noticed that the smoke, attracted by the lines of electrical force, had formed an image on the paper.

Morse was convinced the thing was hot and in 1950 Standard set up the Huebner Co., a wholly owned subsidiary. The subsidiary bought over 100 of Huebner's patents and patent applications in the electronic printing field. Huebner, now in his seventies, became director and vice-president, and Morse is president.

• **Standard's Stake**—Huebner Co. will serve as licensing company for interested manufacturers including Standard Register. Why is Standard opening the way for other firms? Mainly because the wide horizons that have opened up for the Photronic Reproducer—particularly in papermaking and cloth printing—could carry it way off its native course.

Standard has its hands full already as a pace setter in its own line—manufacturing business forms and the feeding and handling devices that equip business machines to use its forms. It claims to be the biggest maker of marginally punched continuous forms in the country. Standard is one company that has thrived as paper work has pyramided.

Standard has hitched its wagon to the big business machine outfits. As fast as typewriters, teletypewriters, and punched card accounting machines have come along, Standard has jumped in with the multiple business forms and feed and removal setups needed fully to exploit their possibilities.

What does Standard want with the Photronic Reproducer? In a number of uses, Standard feels it will provide a dynamic new tool for advancing its present line. Standard has its sights on faster, cheaper printing of its forms and improving its carbon paper production. It feels a printing setup for the electronic computer may be the next logical step in the business records field.

• **How It Started**—That's a far cry from the simple gadget that launched Standard Register—the Autographic Register, patented by a St. Louis lawyer in 1883. That was the earliest sales register, a machine that facilitated handwriting multiple records, worked by a cranking device. But it irked Theodore Schirmer,

## improve on hand bending

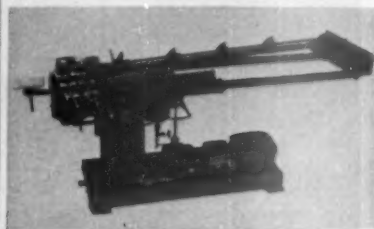
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SEE PAGE 86 THIS ISSUE

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\*PIOLITE—T. M. Goodyear Tire & Rubber Co., Akron, O.

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CHARLES C. MOSKOWITZ  
Vice Pres. & Treasurer



of Dayton, because the copies were always slipping around and the lack of alignment made it impossible to put preprinted language on them. Schirmer hit on the idea of feeding marginally punched continuous forms through the register. To do it, he used a wooden cylinder with a row of teeth-like pins encircling the ends. The pins engaged the marginal holes, moving the paper.

In 1912, Schirmer teamed up with a Dayton broker, John Sherman to open the Standard Register Co., selling autographic registers with pinwheels and the punched forms. Later Sherman developed a modified version of the pinwheel that worked similarly to solve the slippage problem—and open new markets for its punched forms—in typewriters and other machines.

After that came a tremendous variety of forms, feeders, and handlers—some 5,400 different items at last count. Standard sales have puffed out from \$4.3-million in 1939 to \$25-million last year.

• **Sales Setup**—In a way, it looks as if Standard's success was practically unavoidable. But it's also true that Standard's solid sales force of 500 field men have drummed home the theme of streamlined office methods, simplified paper work to executives with a highly potent personal approach. Milferd Spayd, former General Motors sales executive who became Standard president in 1944, speaks like a dedicated man when he tells you, "The paper work problem is bigger than the agricultural problem. More people are shuffling paper." His field men dig into each customer's problems on an individual basis. They send detailed notes back to Standard engineers who solve these problems as custom jobs.

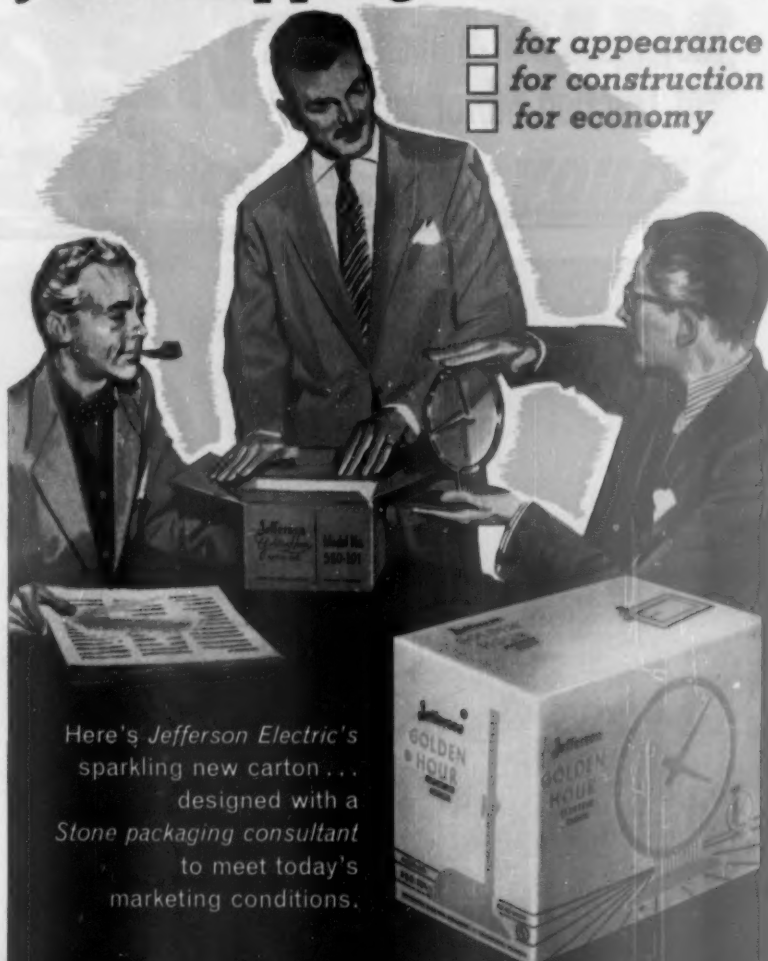
• **On the Fire**—While Spayd shines in sales, Morse acts as prime mover in production. A graduate of the Massachusetts Institute of Technology and an experienced engineer, Morse's big preoccupation lately has been sniffing out new ventures. Along with the smoke printer, the company made a second sally into electronics recently with a set of two machines it built for the First National Bank of Chicago to keep track of traveler's checks.

Right now Standard is toying with the idea of moving on an option it holds with the Huebner Co. for a licensing agreement to turn out a unit that could record 60 microfilm images on a negative the size of a 3x5 file card.

Whether or not he makes this his next project, Morse sees big electronic developments ahead in both the printing and business machine fields and he plans to get into the act. If and when he does, Spayd won't worry about finding a market for the new products. "In our business we'll never run out of prospects. The problem's just too big."

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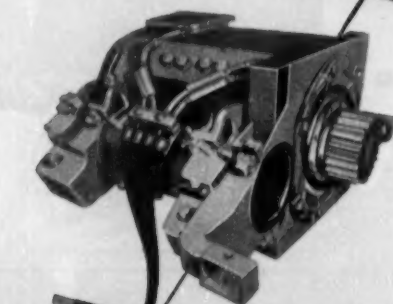
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## Pumping Up Sales

That's just what Kansas-  
Nebraska Natural Gas is do-  
ing—by pushing summer gas  
use for farm irrigation pumps.

Kansas-Nebraska Natural Gas Co. thinks it has found a gimmick that will help lick its biggest market headache: a dizzy drop of 50% in demand for natural gas in its area, come the dog days of summer. What's more, its customers—farmers, and local communities speaking through their chambers of commerce—are just as much sold on the idea as the company itself. The gimmick is irrigation.

Kansas-Nebraska's summer problem is one that would give any natural gas company nightmares. Most pipeline outfits serve large city areas, and when the winter heating demand slacks off, they can still find a ready market among industrial users. This can keep summer sales up within maybe 85% to 90% of the winter figure.

But Kansas-Nebraska's market area is mostly agricultural; its 3,400-mi. pipeline network runs from the Hugoton fields in southwestern Kansas up to northeastern Nebraska. It serves some utilities, but industrial users are scarce. The average population of the 171 towns it reaches comes to less than 1,000—even counting the Nebraska cities of Hastings, Norfolk, Kearney, and North Platte (all in the 10,000-25,000 range). So when summer begins to sizzle, there's nothing to take up the heating slack.

• **Fuel for Water**—At least there wasn't until this year. Right now southeastern Nebraska farmers and Kansas-Nebraska officials are cottoning to the idea of bringing in natural gas as a fuel to run irrigation pumps.

A pump motor chugging away on every irrigable quarter section in the 3,200-sq. mi. area proposed for development would go far toward taking up the summer slack, company officials believe. They think the system, when completed, will be the nation's first network of rural pipelines to serve farmers in this way.

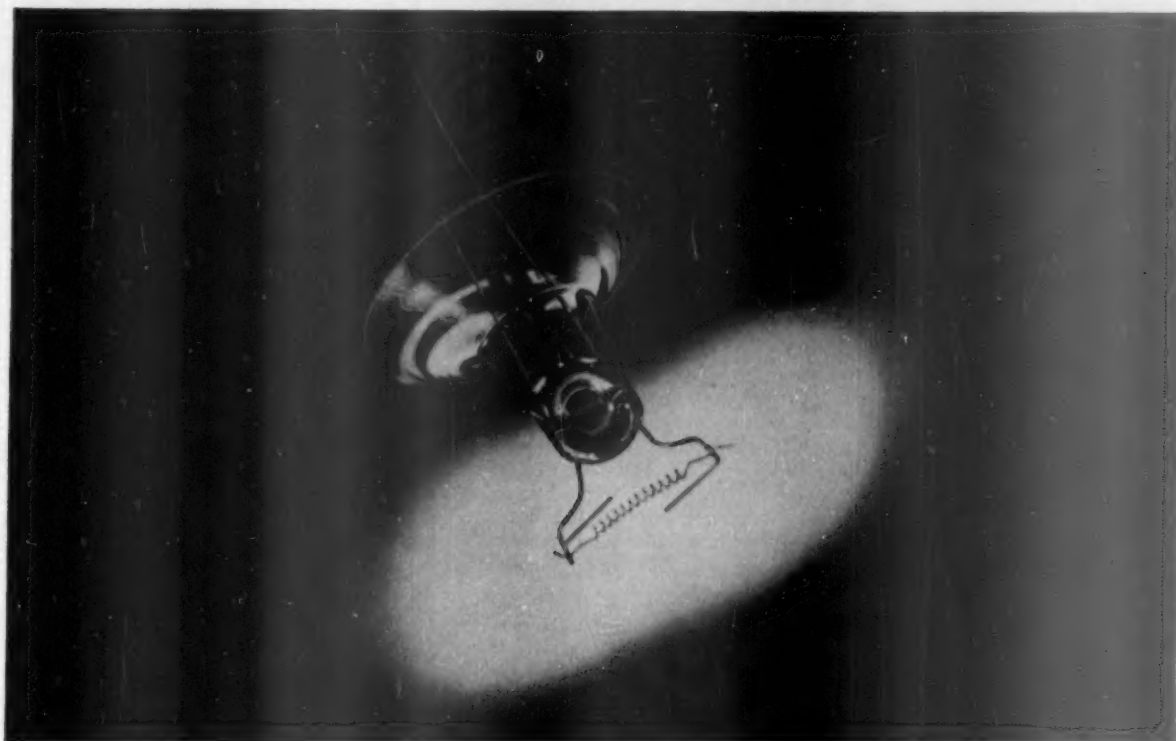
The area is about a 100-mi. stretch of southeastern Nebraska between the Platte and Republican Rivers, stretching from Holdrege at the western end to Sutton and York. The idea got started there only last October, but already between 40 and 50 projects are in various stages of planning, and actual pipeline building will soon get going.

• **Customer Gains**—Farmers are pushing it because of two benefits they see:

• Cheap power for irrigation. Tri-County Public Power District calculated

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that 2 ft. of water—the normal amount required for a summer's irrigation—would cost \$2.86 per acre with gas, against \$8.84 with electricity. There's limited irrigation in the area now, but it has lagged partly because of high pumping costs.

• **Increased yields from irrigation.** The dry land average for corn is about 20 bu. per acre; on irrigated land it's 65 bu. to 80 bu. There's a rule of thumb that putting a pump and well on a quarter section, at a cost of about \$6,000, is equivalent to adding another quarter section at \$25,000 or more.

Local communities see an easing of the wild economic dips that used to go with drought years. Besides, irrigation farms are smaller and farming is more intensive—that means more customers for fertilizers and the like. Pocket-size communities may get natural gas they couldn't otherwise afford.

• **Setting It Up**—As it's being worked out, the setup will be like this:

(1) Farmers establish pipeline districts, provide the right of way, and pay the cost of the line.

(2) Kansas-Nebraska crews will build the lines and supply the gas. The company has set an irrigation rate equal to the lowest it now charges (for alfalfa dehydration mills). For heating, the domestic rate at the nearest town will apply.

The cost of each line is prorated among all farmers using it. Those who will use gas for pumping only pay a full share; for heating only, a one-third share; for both, a share and one-third. Costs vary according to district—from \$2,000 in the smallest district up to \$40,000-\$50,000 in the largest. Typical individual shares run between \$1,100 and \$1,300, with exceptions at both ends. In some districts, banks take over the financing.

Kansas-Nebraska plans to cut all corners to pare construction costs. Using its own crews will eliminate contractor profits. Use of small pipe at relatively high pressure will hold down pipe costs. Pipe will be laid above ground except at crossings.

To insure proper maintenance, the company will retain title to the lines.

• **Farm Aid**—Costs to the farmers will be self-amortizing, as the company figures it. Savings from bigger crop yields and use of the cheaper natural gas as fuel would pay off a farmer's pipeline costs in two to four years, according to A. J. Sigel, division superintendent of Kansas-Nebraska.

Pump irrigation is the next big chapter in farm development in the area, Sigel believes; hybrid seed and modern fertilizer methods have done as much as they can already.

And what about Kansas-Nebraska? "We hope to benefit as the area benefits," says Sigel.

## COMPANIES BRIEFS

**Big-scale diversification** is in the wind for American Car & Foundry Co. Directors revealed this week that they will ask stockholders Apr. 15 to vote on changing the name to ACF Industries, Inc., as a mark of the trend away from dependence on railway equipment. Half the company's volume, it is said, already comes from nonrailway sales.

**Undiversifying** is under way at New York Coal Sales Co. of Columbus, Ohio. The company got out of the cement business a few weeks ago by selling its Superior Cement Co. division near Portsmouth, Ohio; now it has sold its coal business to Sunnyhill Coal Co. of Pittsburgh. It continues to make concrete blocks, ready-mixed concrete, and hot-mix paving material; it also runs quarries and apple orchards.

**Another paper merger** adds Miller & Wright Paper Co. of New York to Alling & Cory Co. of Rochester.

**Sunset Oil Co.** of Los Angeles, big independent producer and marketer, bought United Petroleum Corp., reputed to be the Pacific Northwest's largest independent marketing concern. The deal adds 80 gas stations and several tire stores to Sunset's 700 "Golden Eagle" stations in California. And it gives Sunset an added outlet for its oil products (BW—Feb. 20 '54, p166).

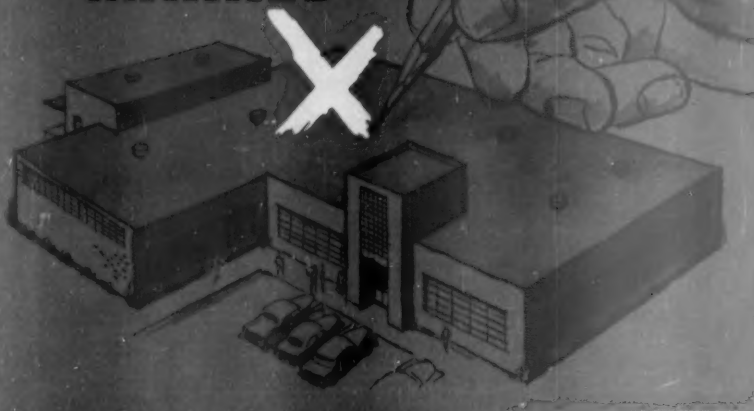
**Piasecki Helicopter Corp.** (BW—Sep. 26 '53, p144) leased 240,000 sq. ft. of space at the old Autocar plant in Ardmore, Pa. Piasecki plans to use the space by the end of the year to make parts now subcontracted. The addition nearly doubles manufacturing area.

**The South's first streamliner** bit the dust last weekend. The Gulf, Mobile & Ohio RR took its Little Rebel off the New Orleans-Jackson (Miss.) run. Service started in 1935, thrived for a while, then lost out to the family automobile. Last year, load averaged only 13% of the train's seats.

**South Pacific Airlines** got an O. K. from the Civil Aeronautics Board to fly between Hawaii and Tahiti. Service is expected to start this summer.

**Two plastics companies** will join General Tire & Rubber Co. of Akron if stockholders of all three corporations approve an exchange of stock. They are the Bolta Co. of Lawrence, Mass., maker of polyvinyl sheetings, and Textileather Corp. of Toledo, maker of fabric-supported plastics. Each reports sales of about \$20-million in 1953.

## In your plant, too, there's THE SPOT MARKED



Somewhere in your plant there's an operation, a process, a station recognized as needing definite improvement.

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High production ammunition loader



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Refrigerator compressor performance tester

## MARKETING



ST. LOUIS CARDINALS Musial, Stanky, and Schoendienst (at right) hear from "Gussie" Busch that his company is back on top.

Buying the Cardinals is a sample of the kind of verve that helped Anheuser-Busch beat Schlitz in sales last year.

# Selling Beer with Baseball

In 1953 Anheuser-Busch, Inc., of St. Louis regained the coveted beer pennant it lost in 1947. For six consecutive years, its arch-rival, Jos. Schlitz Brewing Co., of Milwaukee, has held the No. 1 spot.

The giants have been running it nip and tuck. Actual barrelage figures don't show this for last year, though. According to National Beer Wholesalers Assn. of America, Anheuser-Busch trounced Schlitz soundly—by 6.7-million bbl. to 5.5-million. The catch was the brewery strike last summer, which dampened the hopes of all Milwaukee brewers (BW—Sep. 5 '53, p48).

Without that 76-day strike at the peak of the beer season, Schlitz spokesmen say, Schlitz would have sold close to 7-million bbl., and would have still been beer king. Anheuser-Busch naturally takes the view that the strike didn't change the outcome; it only widened the margin by which it won.

Under good racing conditions, how-

ever, the margin would be narrow enough. In 1952, Schlitz beat Anheuser-Busch by some 300,000 bbl.—6.3-million to 6-million.

• **\$64 Question**—The question of what might have happened if something else hadn't happened is academic. More to the point is: How did the two big brewers stay at the top in a highly competitive industry? The answer is: by following essentially the same policies. On basic matters the two could pass for Tweedledum and Tweedledee. "You could swap the two top managements and never notice the difference," a close observer comments.

• **Parallels**—The superficial similarities are obvious. Both giants are ancient. Schlitz is 105 years old, Anheuser-Busch is 102. Schlitz is entirely owned by members of the Uihlein family; three generations of Uihleins have had a hand in running it. Anheuser-Busch is controlled by the Busch family; August A. Busch, Jr., president (picture,

above), is the fourth Busch to head the St. Louis company.

What's more, both concerns make a premium beer—and both have a common goal. It is to sell more beer at a premium price than anybody else sells, at any price. Paradoxically, Anheuser-Busch succeeded last year by being first in sales practically nowhere, but high enough in a lot of places to be first nationally. Budweiser isn't tops even in its own hometown, St. Louis. Likewise, in Milwaukee, Schlitz's home-site, Blatz is the No. 1 seller.

The premium partly explains this. It's hard for a higher-priced beer to be tops in many markets. Rather, it has to count on winning strong sales over a broad area.

Whether you're located in Milwaukee or St. Louis or Timbuctoo, you need two things to get broad sales of a premium product:

First, you need plenty of it.

Second, you need plenty of advertis-



ing and sales promotion to get people to want it.

Twice in modern times the steady growth of beer production has been interrupted: once by Prohibition, once by World War II. Each time, the two big brewers have had to do a lot of fence-mending.

Both have done it with a will. Since Repeal, Anheuser-Busch has sunk \$116-million into new plants and facilities. Exact figures on Schlitz aren't available on this and other counts. As a family-held corporation, it keeps its vital statistics under lock and key. But it's estimated that it has spent somewhere around \$100-million in the same period.

• **Expansion Race**—After World War II, both companies went in for heavy refurbishings of their home breweries—the only ones they had at that time. August Busch, who had just succeeded his brother as president, decided it was lack of facilities that made Busch lose out to Schlitz. "We've got to get more production," he roared at his directors.

The home plants were expanded to the limit. Then began the step-by-step, side-by-side march to the outlands. Schlitz bought a brewery in Brooklyn. Anheuser-Busch built a brewery in Newark. Two years ago both companies announced, almost simultaneously, they were moving to the West Coast—in Los Angeles County.

Anheuser-Busch is ready to move again—this time south, to New Orleans (BW—Feb. 13 '54, p. 59). Talk is that Schlitz, too, is looking southward, but so far officials are mum about this.

In striking across country for new locations, the big brewers were setting the pattern for the industry. For years the big ones have taken more and more of the market. According to the New York investment house of Reynolds & Co., in a study just released on Anheuser-Busch, the seven top brewers in 1952 accounted for 34.7% of total sales—against 19.9% in 1946. As the giants came closer to the regional markets, the smaller companies dwindled. In March, 1953, there were 307 breweries, against 465 in 1943.

• **Cost-Cutters**—Decentralization of facilities, of course, meant a big advantage on freight costs. Another factor, according to Reynolds, was the brewmasters' acceptance of the fact that they can make the same product in different localities by stabilizing the characteristics of its ingredients. Another important point is the shift to packaged beer away from draught. This put the stress on big brands (BW—Apr. 19 '52, p. 147).

As of now, the Big Two are probably



A modern home temperature control system—symbolized by the slim silhouette of a General Controls room thermostat, could not exist without automatic controls. General Controls, pioneer manufacturer of one of the most comprehensive lines of automatic controls, makes thousands of varieties for domestic, industrial and military applications. For 24 years General Controls research engineers have been perfecting automatic control systems to increase the productivity of industrial processes, improve the quality of products, and make home life safer and more enjoyable. The General Controls trademark shield on an automatic control is your guarantee of dependability, efficiency and trouble-free performance. For the best in automatic controls, it's General Controls.

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**GENERAL CONTROLS**



Plants in: Glendale, Calif., Burbank, Calif., Skokie, Ill.

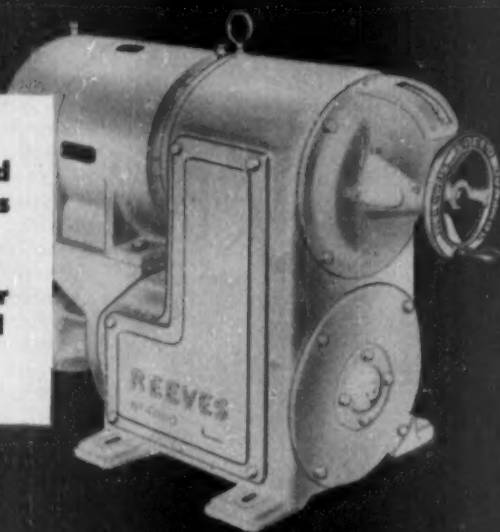
Factory Branches in 37 Principal Cities

SEE YOUR CLASSIFIED TELEPHONE DIRECTORY

Manufacturers of Automatic Pressure, Temperature, Level and Flow Controls for Heating, Home Appliances, Refrigeration, Industrial and Aircraft Applications.

## Choose New or Old NEMA Motors

**REEVES  
Vari-Speed  
Motodrives  
are  
available  
with either  
new or old  
NEMA  
motors!**



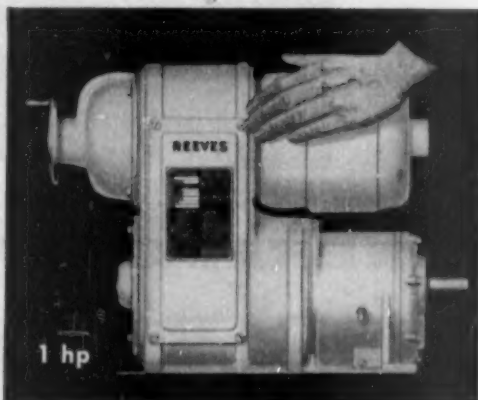
... but always choose  
**REEVES**

With each new development and improvement in industrial progress—such as the new, smaller size NEMA Motors—you can always look to REEVES to be in step with the latest, most modern developments in speed control. You don't have to wait for new designs or adaptations. In keeping with their fine pioneer tradition, REEVES offers you now all the advantages of *smaller* Motodrives in practically every case when you order 1 hp or 2 hp drives with the new NEMA Motors. Write today for complete details to Dept. 5.

**Smaller  
MOTORS...**

**Smaller  
MOTODRIVES!**

for 1 hp or 2 hp  
with new frame  
NEMA motors



REEVES PULLEY COMPANY • COLUMBUS, INDIANA

running about neck and neck on capacity. Schlitz has a brewing capacity of 7-million bbl. a year, with another million coming in when the California plant gets going this spring. August Busch has set a 1954 production goal of 7.5-million bbl.—so obviously his company is not trailing Schlitz by much, if at all. Both concerns have about doubled capacity since 1946.

Just as neither company will yield to the other in production, neither will yield in advertising and promotion. Both have a lot of beer to sell. But at this point you at last find perhaps the major difference between the two giants. You could almost sum up the difference by saying that Anheuser-Busch owns the St. Louis Cardinals and Schlitz does not. In a word, Anheuser goes in for showmanship; Schlitz does not.

What this difference comes to in dollars nobody knows. Trade circles credit Schlitz with a fat \$12-million to \$14-million advertising budget. Anheuser-Busch will say only that last year's outlays were roughly seven times its 1946 expenditures.

• **From Baseball . . .**—Television is a top item on Schlitz's budget. Anheuser-Busch did drop TV for a time in favor of newspaper advertising. Last week, though, it said it would be on TV again this year—to telecast all 77 of the St. Louis Cardinals' out-of-town games. It will broadcast all the games on radio, too.

This new activity is stirring up some argument. This week Sen. Edwin C. Johnson, who is president of the Western League, came out in favor of Rep. Emanuel Celler's bill to bring professional baseball under the antitrust laws. Johnson argues that the sweeping broadcast coverage of the Cardinal games will swamp the minor leagues, put some of them out of business.

When the St. Louis brewery bought the Redbirds last year for the tidy sum of \$3,750,000 (BW-Feb.28'53,p32), it was following its own instincts. It did it partly as a civic gesture to save the team for St. Louis, partly as a promising business investment, and partly with an eye to the team's promotion value for Budweiser.

There was a certain flamboyance about the gesture that is typical of the company's eye for the spectacular. Flamboyance is something Schlitz has steered away from.

• **To Horses**—There's nothing in the Milwaukee brewer's scheme of things, for example, to parallel the remarkable Budweiser cavalry—the Champion Clydesdales, which have been stopping traffic across the country for years (BW-Aug.25'51,p22).

President August Busch has fallen in love with the huge beasts. He has imported stud horses from Scotland, plans

*They found*  
**the better they showed it**  
**the better it sold!**

**THE PROBLEM:** How to keep shoppers from handling the merchandise, leaving finger marks on tools—finger marks which become rust spots . . . How to keep everything clean, sparkling and saleable—longer.

**THE ANSWER:**

Package in Kodapak Sheet.

**BECAUSE** Kodapak Sheet is tough, clear, color-true, free from bubbles and surface defects, merchandise looks better, customers see and buy without handling.

What's more, with multiple packaging, selling time is less. Unit sales increase. So does dollar volume.

For further information as to types, gauges, colors, properties—as well as names of suppliers or users of Kodapak Sheet, call our representative or write:

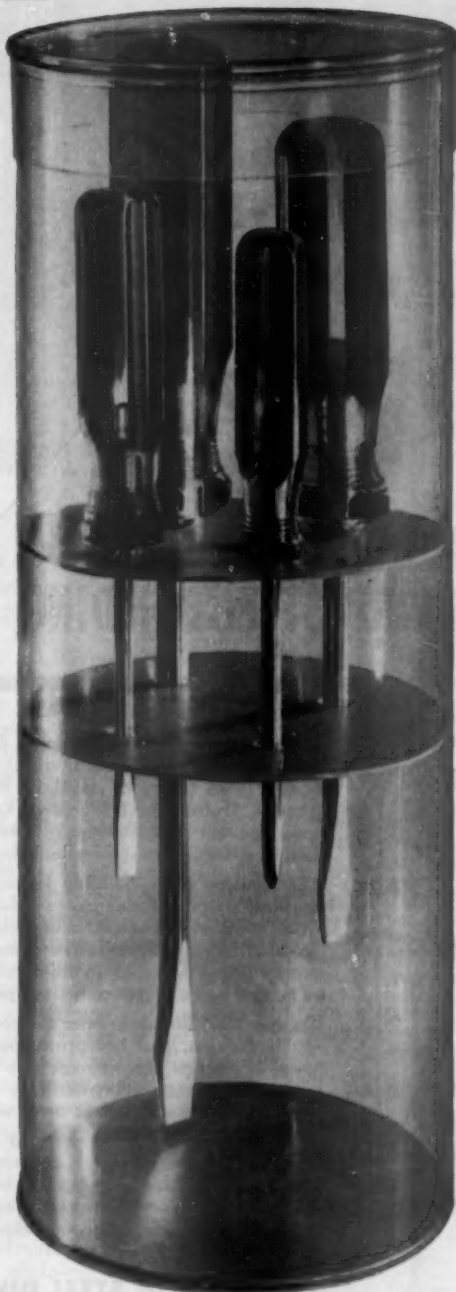
**Cellulose Products Division  
 Eastman Kodak Company  
 Rochester 4, N. Y.**

**Kodapak  
 Sheet**

"Kodapak" is a trade-mark.

**MAKES GOOD MERCHANDISE SELL BETTER**

Sales offices: *New York, Chicago, Dallas.* Sales representatives: *Cleveland, Philadelphia, Providence.*  
 Distributors: *San Francisco, Los Angeles, Portland, Seattle (Wilson & Geo. Meyer & Co.);*  
*Toronto, Montreal (Paper Sales, Ltd.).*



SHUTTLE COCKS



WOODEN TOYS



CLOTHES PINS



SOAP



FISH LURES



STIRRERS



HACKSAW BLADES





*You're  
Looking  
Inside*

## A TRUSCON READY-MADE STANDARD STEEL BUILDING

Look at your choice  
of styles and sizes:

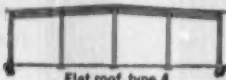


Pitched Roof, type 4



Flat roof, type 1

Flat roof, type 2



Flat roof, type 4



Flat roof, type 4-M



Pitched roof, types 1, 1-3



Pitched roof, type 2

a name you can **build** on

Look at the clear production space. Look at the roof-supporting trusses. Look at the bright interior with plenty of daylight brought in through Truscon Steel Windows. Look at the space for materials movement. Here's a manufacturing set-up with everything in its favor!

This Truscon Steel Building is one of many standard styles and sizes mass-produced by the world's largest manufacturer of metal building products. All are beautifully-engineered structures which you combine in unlimited variations to fit your space requirements and your budget.

Truscon Steel Buildings offer the economies of standardization, plus fire protection, ease and speed of erection, low upkeep, high investment value. Top salvage value, too—they can be dismantled and re-erected at moderate expense.

Why not make a note now of your anticipated manufacturing, warehousing, and storage needs? Pass it along to Truscon engineers who will work with your staff to develop the building "package" you need. Truscon's free book helps you plan. Write today.

### TRUSCON STEEL DIVISION REPUBLIC STEEL

1076 ALBERT ST. • YOUNGSTOWN 1, OHIO  
Export Dept.: Chrysler Bldg., New York 17, N.Y.



SCHLITZ'S ads carry a conservative note, as befits a conservative family.

to breed the biggest and best Clydesdales in the world. He also has a wagon hitch of small Sicilian white donkeys to tote the name and glory of Budweiser around the country. Now he's trying to breed tiny Sardinian donkeys with Shetland ponies to produce a new type of tiny draft animal for his tiny display wagons.

Busch is pouring money into the Cardinals with the same enthusiasm. Some \$1.5-million is going into renovating Sportsman's Park (renamed Busch Park) in St. Louis, and Redbird farms around the country. He has added nine full-time scouts to the Cardinal organization, is spending \$335,000 for new players. Just this week, the Cards paid around \$100,000 for the Yankee's star pitcher Vic Raschi.

• **Two Tones**—A little of the difference in flavor of the companies' personalities shows in their advertising, too. Both companies, steeped in family tradition, are careful to keep the tone of their ads high and wholesome; the accent is on gracious living and family living. But whereas in publication ads Schlitz puts the heavy stress on magazines, Anheuser-Busch spends some \$2-million on newspaper advertising. There's more of a swagger in the Budweiser copy. "When you know your beer, it's bound to be Bud," says Anheuser-Busch, with a flourish. "If you like beer you'll love Schlitz," says Schlitz moderately.

• **Schlitz's Bid**—A look at the Schlitz TV programs brings this difference into sharp relief. The company made a deal with Columbia University by which for \$100,000 it got rights to Pulitzer plays and other materials for its Pulitzer Playhouse program. Halls of Ivy, starring the Ronald Colmans, won a radio dramatic award. Now Schlitz

sponsors a half-hour TV drama show, Schlitz Playhouse of Stars, on CBS.

Some distributors grumble that Schlitz has gone overboard on the high-brow side. Shows of this caliber may win prizes, but they don't tap the beer-drinking audience, they say.

The different tempo of the advertising and publicity is a gauge of the individuality of the bosses.

• **Aggressive**—August Busch, who took over in the sad year when Anheuser-Busch lost its beer crown, helped pull his company back. He is a traditionalist, but a traditionalist with plenty of daring. He rides his business much as he rides his horses on a steeplechase course: "Let's get over this one now!"

Along with "Gussie," there are plenty of other Busches around to temper the verve of the ebullient president. Eberhard Anheuser, grandson of the company's founder, is chairman of the board. Then there are Adalbert von Gontard (Gussie's cousin), in charge of sales, and nephew Adolphus Orthwein, in charge of production. There are some nonfamily members in key spots, too—John L. Wilson, executive vice-president, is the star example.

• **Conservative**—No Uihlein appears to dominate Schlitz as Gussie Busch dominates his company. Undoubtedly, however, Erwin C. Uihlein, president, has done much to bring Schlitz to its present high rank. With his brother, Robert A. Uihlein, vice-president and secretary, and an outsider, S. E. Abrams, executive vice-president, he makes the top team. Vice-president Robert A., Jr., is one of the younger members.

Perhaps because it's on the whole an older group, it's a more self-effacing one than you find in the St. Louis concern. Erwin Uihlein is 67, Robert, Sr., is 71, and Abrams, who makes many of the decisions, is 80. Abrams in particular stays in the background. Abrams is not a stockholder in the company, and his decisions can be overruled—but reportedly they rarely are.

Both companies follow parallel distribution patterns. Most of the beer goes through wholesalers, whose loyalty both companies boast of. Both insist on general pricing patterns of no favorites. And both dole out their product on an allocation basis. This is so much the case at Anheuser-Busch that August Busch reports the company didn't even divert beer to Milwaukee during last summer's strike.

The one noticeable marketing difference is that Anheuser-Busch sells its draught beer under a separate brand name, Michelob. At Schlitz, everything is Schlitz. Michelob is a prize product at Anheuser-Busch—so delicate in flavor that the company says it can't be packaged. It is working on a special "family" keg, though, for small house parties.

## Warehouse Store

That is Carson Pirie Scott's answer to competition for the dollars of bargain-hunters.

Department stores all over the nation have long been waging a none-too-successful battle against (1) the drift of population—and buying power—to suburbs, and (2) increasing competition from specialty stores (BW—Nov. 14'53, p50).

They have countered the population shift by opening suburban satellite stores. But they haven't been able to do much about their loss of trade to stores specializing in appliances, floor coverings, and home furnishings.

• **Selling from Warehouse**—Last week, Carson Pirie Scott & Co., big Chicago department store, acted to meet this competition on its own level. In its service building on Chicago's southwest side, it opened a full-time "warehouse store." Here, the sales appeal will be simply and solely price.

This is strictly a barebones operation. Some 33,000 sq. ft. of warehouse space have been cleared out and cleaned up for display purposes. Purchasers are expected to carry their merchandise away—or pay a delivery charge. But charge account and deferred payment privileges are extended to customers. Even store hours are adjusted to the desires of those who buy for a price. The warehouse store will be open from noon to 9 p.m. Mondays through Fridays, from 10 a.m. to 6 p.m. Saturdays. Parking space for 300 cars is scheduled to be enlarged.

• **Variety of Wares**—Merchandise offered is primarily furniture, floor coverings, major appliances, toys, garden equipment in greater variety than the downtown store carries, radio and TV sets, and some soft goods. The offerings fall into three broad classes:

• **Special purchase merchandise**, largely home furnishings, including goods on consignment from manufacturers who want to clean out inventories.

• **Overstocks from the downtown store**, items that are "tired from hanging around," floor samples, damaged goods, discontinued goods, and, to a small extent, trade-ins. (Carson's has little trade-in business, and that is confined largely to TV.)

• **"Convenience items"** such as work clothes, children's play wear, inexpensive casual wear for women.

• **Fed Up to Here**—The store expects frankly to compete with discount houses as well as specialty stores. For the time, being, at least, its appliance discounts



*Less than 10¢ per day*

... to operate

a **P&H** Hoist  
in this business

LESS than the cost of a telephone call — that's all it takes to operate a P&H Zip-Lift Hoist for a full day at the Tinus Marine Service in Oconomowoc, Wisconsin.

Harold Tinus and his men use a pair of Zip-Lifts for stacking boats seven-high in storage cradles, and for hundreds of other back-saving, money-saving applications.

Just imagine what the savings in your business would be if you could free two or three skilled laborers for other jobs, and let one man with a Zip-Lift handle the muscle-strainers.

Application isn't limited by business category, either. Thousands of Zip-Lifts are in operation all over the country, in such diversified fields as bakeries, dairies, hospitals, buildings, metal shops, etc. The cost is small. Use the coupon below for complete information — and the detailed, factual story on how Mr. Tinus operates a Zip-Lift for only 9.7¢ per day!

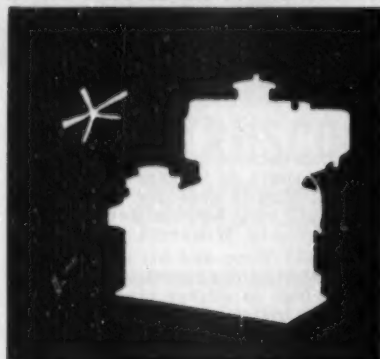
**P&H HOISTS**  
**HARNISCHFEGER**  
CORPORATION  
4468 West National Avenue, Milwaukee 46, Wis.

P&H Hoists  
HARNISCHFEGER CORPORATION  
4468 West National Avenue, Milwaukee 46, Wis.  
Gentlemen: Please send me the case history on Tinus Marine Service. I'd also like more information on Zip-Lift, Pushbutton Model ☐ Zip-Lift, Rope Control Model ☐ Hevi-Lift ☐ Chain Hoists ☐ Jib Cranes ☐

Name.....  
Title.....  
Company.....  
Address.....  
City.....Zone.....State.....

## TWO "TOUGHIES"

...licked by  
Thompson



**THE POWER STEERING PUMP** (shown above) was Thompson's highly successful answer to the need for an internal gear pump with more uniform flow, better distribution of driving pressure, improved operating efficiencies and competitive manufacturing costs.

**X** BELOW belongs the picture of a product that would answer your need for... well, you name it and Thompson's Special Products Division will come up with the right answer. Thompson engineers have the skill, experience and *curiosity* to take a knotty engineering problem apart, put it together again and make it tick!

Also, Thompson Products has all the facilities needed... from forging through heat-treating, to machining, finishing and assembly. Whatever your design, development or engineering problem, why not put it up to our Thompson engineers? Just write Special Products Division of Thompson Products, Inc., 2196 Clarkwood Road, Cleveland 3, Ohio.

You can count on  
**Thompson Products**  
SPECIAL PRODUCTS DIVISION

will have to be confined to discontinued lines on which price cuts can be made. But a Carson official hinted at broader competition.

"We're tired of being display rooms for brand-name merchandise which customers buy elsewhere," he said.

• **Summer Success**—Decision to open a permanent warehouse store stems from Carson's experience with two special warehouse sales last year.

A summer sale, widely advertised, drew customers from all over the metropolitan area. Buyers included people from the exclusive North Shore area, who drove in 30 mi. or more and carted bargains away in their station wagons.

A smaller sale in October was promoted only in the neighborhood of the

warehouse. This attracted overwhelming response from factory workers living in the immediate area.

"Geography favors the location of the warehouse store, considering the type of merchandise we will handle there," a Carson official said. "But it's also obvious we have only to advertise the stuff to pull customers in from all over Chicago and suburbs."

• **Suburbs**—Carson's isn't ignoring the suburban store idea, however. It has one such store in a highly successful shopping center in suburban Evergreen Park, on the city's southwest outskirts. And last week it obtained a zoning change on a 154-acre tract in Wilmette, a North Shore suburb, where it will build a second suburban center.

## Home Ironer Sales Cool Off

And the price-lifting effect of the excise tax is only one reason... Truck makers try glamor to overcome the pinch of sales competition.

Along with the appliance industry as a whole, home laundry equipment makers are complaining loudly about the depressing effect of the 10% excise tax on sales. Last week the American Home Laundry Manufacturers Assn. turned loose a particularly heavy barrage. It told Washington that, thanks to the tax, automatic ironer sales have dropped 42%.

In fact, said the group, things are so bad that four manufacturers have stopped making the product altogether. Two of the companies that have abandoned the field: Easy Washing Machine Corp. and General Electric Co. Figures just compiled by Retailing Daily, trade newspaper, underscore the difficulty. December shipments of ironers by manufacturers were down a thumping 59% from shipments of a year ago.

• **Other Troubles**—There's no doubt that an extra \$25 or so may sometimes be the final blow that kills an ironer sale. But the same tax applies to other appliances (with the exception of washing machines, vacuum cleaners, and sewing machines)—and other appliances weren't nearly so badly hit in December. At least one of them, the home laundry drier, actually showed a gain in shipments over the previous year.

Why, then, did the ironer have so much more trouble? To put it simply, the automatic ironer has turned out to be one of those bright postwar dreams that failed to live up to advance billing.

One of the ironer's chief troubles has been the postwar change in peoples' habits. Housewives, particularly urban ones, have cut down on their ironing. A joint study made by Procter & Gam-

ble Co. and the laundry industry shows that less than half the sheets washed at home get ironed. Towels don't get ironed in a lot of homes, either.

Furthermore, changes in clothing have made a difference. Gone are the frills and flounces of a past generation. Both boys and girls get dressed in rough dungarees. Synthetics either don't need ironing in many cases, or have the flounces and pleats built into them.

Thus, the potential demand is probably a lot lower than the industry thought. Furthermore, some observers say, the industry has failed to sell the machine properly. Automatic ironers aren't pushbutton jobs. They take some skill to operate, and manufacturers may have failed to show how to demonstrate and sell the machines effectively.

## Glamorizing Trucks

This year of tough competition has sent the truck and trailer industry, normally conservative in its promotional techniques, to Detroit to borrow some of the glamorous methods pioneered by the passenger car industry. Last week the results showed up in two places:

• The White Motor Co. rolled several of its trucks into the Hotel Commodore in New York City, swathed them in ribbon and wrappings. Then, at lunch, for representatives of 115 firms that use Whites, company officials dramatically tore the wrappings off, gave the 300 people present a peek at the latest models. White calls its event the National Accounts Truck Show and plans to tour the country with it. Prospects for business, says the



# These American businessmen show how much you can gain from a visit to the 1954 British Industries Fair

Plan now to inspect hundreds of British-made products which you can import and market at a profit. Make direct contact with the manufacturers and compare quality, prices, deliveries on the spot



Samuel Poncher

"I was completely astounded by the number of forward-looking new products I saw at the 1953 British Industries Fair," says Samuel Poncher, president of the Newark Electric Company, Chicago. "The variety of exhibits in the electronic and radio line was very impressive, and led to my purchasing quite a bit of merchandise from British manufacturers. I am sure every progressive concern will do well to send a representative to the Fair in 1954."



Arthur C. Kaufman

"We make it a policy to have as many of our buyers as possible plan their European trips to coincide with the dates of the B.I.F., because it is such a time-saver for them," says Arthur C. Kaufman, head of the Gimbel-Saks European Buying Offices. "At the Fair they are able to get a splendid idea of the new things which have been developed in the British Empire during the past year, and discover many unusual items."



W. C. Cottongim

"I visited the 1953 British Industries Fair, and was surprised and impressed by the amount of merchandise so effectively exhibited," says W. C. Cottongim, president of the C & H Air Conditioning Fan Company, Atlanta, Georgia. "If it were not for the Fair, the foreign buyer would spend many additional weeks seeking out and visiting the plants of manufacturers. I am looking forward to another pleasant and profitable visit to the Fair in 1954."

**WHAT'S YOUR LINE?** All these industries will exhibit at the B.I.F., May 3—May 14, 1954.

#### Olympia, London

Baby Carriages  
Boats and Small Craft  
Brushes and Brooms  
China and Earthenware  
Cosmetics and Toilettries  
Cutlery  
Drugs and Drug Supplies  
Fancy Goods  
Haberdashery  
Household Chemical Products  
Jewelry, Real and Imitation  
Laboratory Equipment  
Glassware  
Medical, Surgical and Dental Instruments and Appliances  
Musical Instruments  
Notions, Lampshades and Tobaccoconiles' Sundries  
Office Machinery and Equipment  
Opticians' Supplies  
Organs  
Packaging Machinery  
Paper, Printing, Publishing and Stationery  
Photographic, Motion Picture Equipment and Supplies  
Printing Machinery  
Safes, Strong Boxes, etc.  
Scientific Optical Instruments  
Sporting Goods  
Toys and Games  
Umbrellas and Walking Sticks  
Watches and Clocks

#### Earls Court, London

Amusement Trades  
Beds and Bedding  
Clothing  
(Including Custom and Ready-to-wear  
Clothing, Sports Clothes)  
Confectionery  
Floor Polishers and Vacuum Cleaners  
Foods and Beverages, etc., Jams, Marmalades and Jellies  
Footwear  
Furniture, Carpets, Linoleum and Mirrors  
Hats and Caps  
Prefabricated Buildings  
Sales Service  
Sports Clothing  
Textiles  
(Including Yarns, Piece Goods, Furnishings, Made-up Goods and Household Textiles)  
Tobacco and Cigarettes  
Trade Publications  
Vending Machines  
Wallpapers  
**Plus a display of Commonwealth Products**

#### Castle Bromwich, Birmingham

Agricultural Equipment  
Art Metalware  
Bathroom Fittings  
Chemicals  
Civil Engineering Equipment  
Constructional Aluminum Work  
Counting, Weighing and Testing Machines  
Dairy Licensable and Equipment  
Die-Casting Machines  
Electronic, Electrical, Electro-Magnetic Appliances  
Hardware, Paint Spraying Equipment  
Hotel and Bar Fittings  
Industrial Ceramics  
Industrial Gas Equipment  
Marine Equipment  
Materials Handling Equipment  
Metals  
Mining Equipment  
Paints and Decorative Finishes  
Plastics, Industrial  
Plastic Molding Machines  
Pumps  
Radio and Television  
Transmission Apparatus  
Rubber Products  
Stainless Steel Equipment  
Tools  
Welding Machines  
Welding Equipment  
Woodworking Machinery

For further information about the B.I.F., write or phone your nearest British Consulate

RESERVE YOUR FREE COPY OF THE B.I.F. CATALOGUE NOW!



To: British Consulate-General, Dept. A  
350 Fifth Avenue, New York 1, N. Y.

Please mail me as soon as available my copy of the B.I.F. Catalogue. I want:

Vol. 1—Consumer Goods (London) ☐

Vol. 2—Engineering & Industrial (Birmingham) ☐  
(Check either or both)

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_

Advance edition of B.I.F. catalogue, listing nearly 2000 firms, is due to arrive from England in early March.



## TV spot news — by Raytheon Microwave

Because of Raytheon's microwave equipment, America's TV audience gets a ringside seat at important news events. Used to televise the Yucca Flat atomic explosion, Raytheon's Magnalink®—world's most powerful—beamed picture and sound to the TV station over 100 miles away. A compact, portable version is easily carried to a football game or fire.

Raytheon microwave units also provide connection with network TV and multi-hop relays over long distances. Picture and sound travel together. Another highlight in Raytheon's 25 years of "Excellence in Electronics."



RAYTHEON MANUFACTURING COMPANY, WALTHAM 54, MASSACHUSETTS



**RAYTHEON TELEVISION SETS** feature new VU-matic® Control for all-channel VHF-UHF tuning. Raytheon TV — "Built for Today — Designed for Tomorrow." See it!



**ULTRASONIC CUTTING**—Ultrasonic Machine Tool—new method for shaping, sharpening, drilling and cutting hard metals & ceramics by abrasive action.

company, look good at this stage. Sales last year came to \$167-million, a gain of about \$17-million over 1952.

• In Cleveland, the Fruchauf Trailer Co. frankly borrowed a page from General Motors' Motorama idea in putting together a big sales convention in the Coliseum. This was the first such affair that Fruchauf, now a \$193-million-a-year enterprise, has held since 1939, when it was a \$6.5-million concern.

Fruchauf showed its full line of trailers (44 of them) amid a two-day round of skits, luncheons, dinners, talks. Five-hundred Fruchauf salesmen came from all over the U. S. and Canada to take in the gleaming array of trailers in corrugated aluminum and stainless steel.

## MARKETING BRIEFS

Canadian TV sets now total 640,000. Estimated audience: 2.5-million. The Canadian Broadcasting Corp. operates six stations, private interests two.

• A Seattle fur dealer is the first to be charged with violations of the 1952 Federal Fur Products Labeling Act (BW—Aug. 11 '51, p120). FTC charged Ed Hamilton Furs, Inc., with mislabeling furs and misrepresenting prices as wholesale.

• Records on newsstands will get a nine-month test starting this week. Popular Science's distributing company, S-M News Co., will display one popular record per month, either RCA Victor or Mercury, in 1,250 high-traffic outlets mainly in the Northeast.

• Marketing data: Small Business Administration's new booklet Making Your Sales Figures Talk tells how to develop new markets and cut selling costs. . . . Revised 12th edition of the Retailers Manual of Taxes and Regulations with several new sections has been issued by Institute of Distribution. . . . Benjamin W. Corrado, New York liquor consultant, is about to publish Corrado's Handbook of Liquor Marketing, gathering all of the industry's statistics between covers.

• The upright freezer is shouldering the chest-type out of the way. Factory output in December for the uprights was 10,204, up 90%. Chest freezers were down sharply.

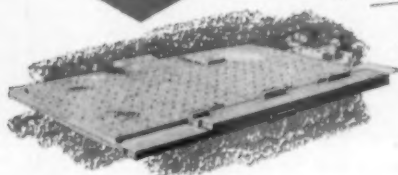
• Chain grocery stores have recaptured their prewar share of the U.S. grocery business. Food Topics magazine reports that the chain's share of the business reached 40.5% last year as against 40% in the last prewar year (1941).

# Nearly 4 Miles of **MILLS MOVABLE WALLS**

Provide

## Space Control

at **UNITED AIRCRAFT**



Hamilton Standard Division,  
United Aircraft Corporation,  
Windsor Locks, Connecticut

Architects: Albert Kahn Associated  
Architects & Engineers, Inc.

Builders: Turner Construction Co.

Write for complete information and literature on this modern efficient way to subdivide interior space, or see the Mills Catalog in Sweet's Architectural File.

THE ability to expand, contract or adapt production facilities quickly and efficiently is of primary importance in aircraft manufacturing today. As part of its program for preserving this essential flexibility United Aircraft makes extensive use of Mills Movable Walls in its offices and plants.

Mills Walls give United Aircraft *Space Control*—because they can be moved quickly, easily and at low cost. Changes can frequently be made overnight or during a week end.

Mills Walls combine efficient mobility with attractive appearance, structural stability and moderate cost. They are insulated and soundproofed, easily wired, and require only occasional washing to keep them looking fresh and new.

THE MILLS CO. 964 WAYSIDE ROAD, CLEVELAND 10, OHIO

MILLS *Movable* METAL WALLS





**Satisfaction rests on the carton**



To the housewife who has bought frozen vegetables for dinner, quality control means simply that she can trust them to look good and taste good when she serves them. One of the safeguards upon which she depends, probably without ever thinking about it, is the shipping carton that carries her vegetables from packer to retailer. Libby, McNeill & Libby is among the many food processors for whom Union corrugated shipping containers continue to do an unheralded but important job.

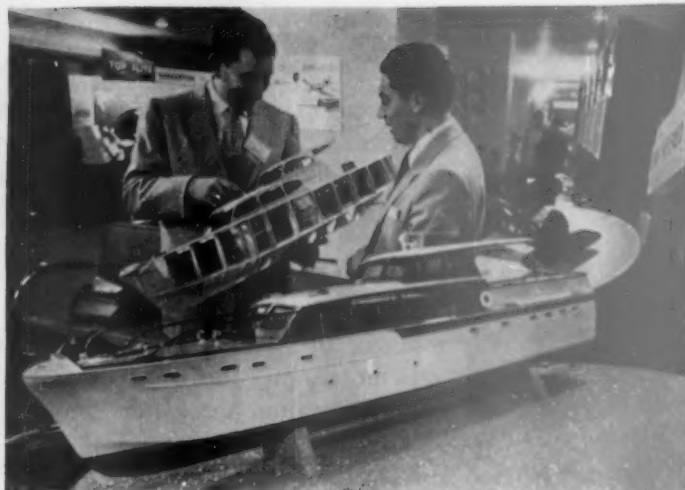


**UNION BAG & PAPER CORPORATION**

CORRUGATED CONTAINER DIVISION • Box Plants: Savannah, Ga., Trenton, N. J., Chicago, Ill.  
Eastern Division Sales Offices: 1400 E. State St., Trenton 9, N. J. • Southern Division Sales Offices: P.O. Box 570, Savannah, Ga.  
Western Division Sales Offices: 4545 West Palmer, Chicago 39, Ill. • Executive Offices: Woolworth Bldg., New York 7, N. Y.



U. S. MISSOURI in miniature led the fleet at the Chicago Hobby Show. The Revell, Inc., item (\$5.95) is battery powered.



CHRIS CRAFT cruiser like this one will set back a millionaire \$105,000. A Sterling Model craft costs a hobbyist \$18.95.



TINY MOTOR held by A. E. Gaskia of Allyn Sales Co. really works. Hobbyists' love of realism is building a huge business.

## Hobbies: Realism Is What Sells

If last week's trade show in Chicago is any indication, model boats are going to be a big factor in giving the hobby industry another big push forward this year (pictures). The boats made the loudest splash at the show, with plastic and wood scale models of everything from outboard racing shells to a 40-in. cabin cruiser.

This trend to the water is the latest twist in the growth of the "new leisure" and the American's urge to make something with his hands—a growth that last year sent hobby industry sales to a new top for the past 20 years. The Model Industry Assn. told its members at the

Chicago show and convention that hobby enthusiasts, young and old, spent \$301-million in 1953 on hobby kits, models, and materials.

That was a 15% jump from 1952—and almost seven times the industry's volume of \$44-million in 1945, first year it compiled such figures. For 1954, industry leaders are confidently predicting another healthy boost of 15% to 20% over 1953.

• **From Paint to Pilots**—The industry's sales totals take in an ever-widening field, including kits and materials for some 350 creative hobbies. These range from model railroads, airplanes, boats,

and automobiles, to leather crafts, textile painting, "numbered" painting sets, and the like.

Not counted in the hobby manufacturers' totals are sales in such related leisure-time fields as photographic supplies, sporting goods, gardening supplies, or tools and materials for do-it-yourself home improvements, or toys, or completed models. The hobby makers disown such things as not creative enough.

To be a true hobby, says the Model Industry Assn., the article must have a creative element: The buyer must assemble or do something to the model

## How to get

the cash your company needs in 1954—to pay taxes or meet payrolls, for plant modernization, to carry larger receivables, etc. . . ? Simple! COMMERCIAL CREDIT's method can provide

## from \$25,000

to millions of dollars—without diluting ownership, without mortgaging future profits, without hampering company operation. Some individual companies in this way used during 1953 up

## to 5 million

dollars of COMMERCIAL CREDIT's money. COMMERCIAL CREDIT in 1953 advanced more than 600 million dollars for working capital purposes alone. In most cases, cash was forthcoming

## within days

of first contact. COMMERCIAL CREDIT's method is efficient and economical. It lets you increase or decrease the amounts of cash used at any time—lets you use it just

## for months

or as long as there's need. COMMERCIAL CREDIT funds are available on a continuing basis. The single reasonable charge is a tax deductible expense. To get cash for temporary needs

## or for years

write, wire or phone the nearest COMMERCIAL CREDIT CORPORATION office listed here. Say, "Send me information about the plan offered in *Business Week*."

BALTIMORE 1—200 W. Baltimore St. CHICAGO 6—222 W. Adams St.  
LOS ANGELES 14—722 S. Spring St. NEW YORK 17—100 E. 42nd St.  
SAN FRANCISCO 6—112 Pine St.

*A Service Available Through Subsidiaries of*

**COMMERCIAL CREDIT COMPANY**

*Capital and Surplus Over \$145,000,000*

“... some of us used to say we made kits for model spoilers . . .”

HOBBIES starts on p. 59

or material himself, to put it in the hobby class.

• **Spreading Out**—At the trade show last week, 170 manufacturers of kits and materials for hobby lovers showed their latest designs and models to buyers from the industry's 70 wholesaler jobbers, and from the rapidly growing number of retail outlets for hobby merchandise.

About 10,000 retailers now stock hobbies, the trade estimates. Of these, about 5,000 carry hobby materials only. Another 3,000 are predominantly hobby stores, but carry other related lines such as toys and sporting goods. Two thousand other retailers—department stores, variety stores, and sporting goods stores—now have hobby departments. Even that doesn't meet the rocketing demand. The simpler hobby kits were finding their way last year into other types of retail outlets—drug stores, tobacco stores, toy shops, and book and stationery stores. Their acceptance is steadily increasing.

Two trade papers in the field each have a circulation of about 10,000.

• **Mass Production**—The recent mushrooming both of industry sales and retail outlets for hobby merchandise has two main causes. First is the fact that the industry can now produce simple models in large quantities, according to industry leaders.

Many manufacturers, especially in the model field, have grown out of the basement-type operation into good-sized modern and efficient plants, capable of designing and producing good quality products on a mass production basis.

What's more, they have designed, improved, and simplified model kits to attract both the beginner and the experienced craftsman. "Kits now are not so simple that the models are already finished when the customer buys them," said one manufacturer. "Before the war, some of us used to say we made kits for model spoilers, not model builders."

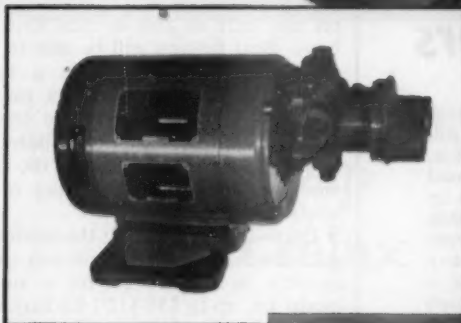
• **Plastics**—Second big volume builder for model makers has been the use of plastics in models. One of the biggest model successes in the past two years is a line of plastic model kits for old-time model autos, brought out by Revell, Inc., Venice (Calif.) model manufacturers.

Revell first brought out perfect scale models of old cars completely assembled as toys. They were something of a flop. When the company began to



# Shrinking the World

THROUGH AERONAUTICAL  
ACCESSORY ENGINEERING



Just how far flight of the future will go beyond present limitations of altitude, speed and distance surpasses imagination. New records are being made with constant regularity, giving us a clue to the startling developments that lie ahead for all types of aircraft—military, commercial, civilian. Of one thing we can be sure: it is the *engineer* who will be responsible for these new and greater achievements.

A typical example is the high pressure, motor driven hydraulic pump shown here—completely "ADEL-Engineered"—now in production for current aircraft applications. It is but one of the many units ADEL has been called upon to engineer, develop and produce in record time for the aircraft industry—another step in the continuing program of "shrinking the world."

ADEL DESIGNS AND MANUFACTURES AIRCRAFT ACCESSORIES IN THE FOLLOWING MAJOR CATEGORIES: Hydraulic and Pneumatic Control Equipment; Heater, Anti-Icing and Fuel System Equipment; Engine Accessories and Line Supports.

*If it calls for CREATIVE ENGINEERING...call for ADEL!*



**ADEL**



Write for new, descriptive Bulletin containing detailed data on Heater, Anti-Icing & Fuel System Equipment. Address: ADEL DIVISION, GENERAL METALS CORPORATION, 10797 VAN OWEN ST., BURBANK, CALIFORNIA.

## GENERAL METALS CORPORATION

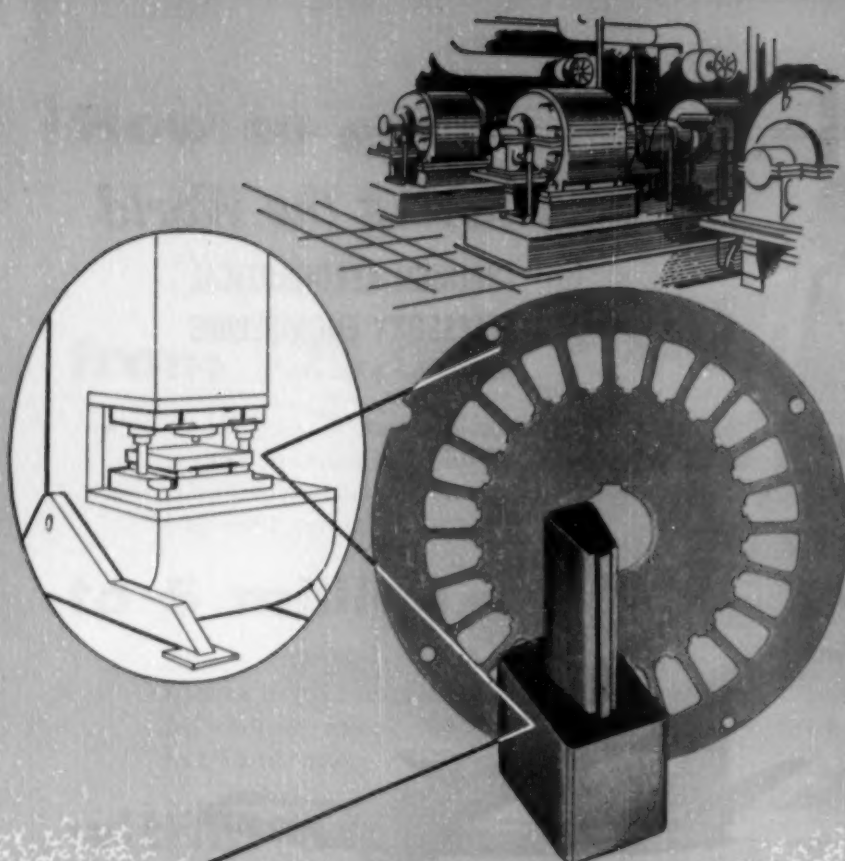
Subsidiary of TRANSAMERICA CORPORATION

EXECUTIVE OFFICES: 18th & FLORIDA STREETS • SAN FRANCISCO 10, CALIFORNIA

**ADEL DIVISION** • Aircraft, Industrial & Marine Hydraulics . . . Plants at Burbank, Calif.; Huntington, W. Va.  
**ENTERPRISE DIVISION** • Marine & Stationary Diesels, Oil Burners, Feed Process Equipment . . . Plants at San Francisco, Calif.  
**PACIFIC FITTINGS DIVISION** • Pipe Fittings, Couplings, Nipples . . . Plants at San Francisco & Hollywood, Calif.  
**METALS DIVISION** • Foundry & Forge Products . . . Plants at Oakland & Los Angeles, Calif.; Houston, Texas



Hydraulics • Line Supports • Diesel Engines • Process Machinery • Oil Burners • Castings & Forgings • Pipe Fittings



## KENNAMETAL® DIES... Cut Costs for Electrical Parts Manufacturers

Millions of die-punched laminations are required in building electric motors and transformers. The laminations must be turned out fast. They must be accurate and smooth, free of rough edges that could damage electrical windings and cause failures.

To avoid roughness, the punches and dies must be kept sharp—a problem since laminations are punched from gritty, high silicon steel that rapidly dulls ordinary die sets. Frequent changing and resharpening of high precision dies is costly and builds up to a major cost problem . . . a problem Kennametal K92 is solving for one large electrical manufacturer by staying sharp 10 times longer than conventional high carbon, high chrome die sets.

Each of the first 50 Kennametal dies installed on this job is averaging 1¼ million strokes between sharpenings while operating at the terrific speed of 700 strokes per minute. This compares with an average of 110,000 for dies previously used. The first Kennametal die on this

operation has made 56 million punchings after 49 sharpenings . . . and it is still good for many more millions of strokes.

Kennametal tungsten carbide is used in many industrial processes to step up production and reduce costs. Tools made of it cut high Brinell steel 3 to 10 times as fast as tools of steel . . . last many times as long. Its field of application is almost limitless when a material of high abrasion, shock, and wear-resistance is needed. It is almost as hard as the diamond . . . up to 100 times as resistant to wear as steel.

Kennametal is made by exclusive and patented processing methods. Control of all techniques, from the mining of tungsten ores to refining, to production and application of the final product assures the uniform quality and consistent performance of Kennametal once it is applied to a specific operation.

Tell us your problem. Our metallurgists and engineers may be able to help you solve it with Kennametal.

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**KENNAMETAL Inc.**  
Latrobe, Pa.

WORLD'S LARGEST Independent Manufacturer  
Whose Facilities are Devoted Exclusively to Processing and Application of CEMENTED CARBIDES

SALES OFFICES IN PRINCIPAL CITIES

**" . . . the model airplane builders may have to look to their blue ribbons . . . "**

**HOBBIES starts on p. 59**

put the parts unassembled into kits, selling them to model builders as a hobby, they turned into a wildfire success.

Biggest single seller in the model field has been a plastic scale model of the battleship Missouri, retailing for \$1.98, and put out by Revell. It was so successful that Revell added a battery-powered version this year (picture, page 59). Trade estimates put Revell sales at around \$8-million last year.

• **Popular**—In this air-minded age, it's not surprising that several companies that make 10¢ glider models sell as many as 2-million a week. Comet Model Hobbcraft, Inc., Chicago, one of the first makers of model airplanes, does over \$2-million in annual sales of model planes and boats. A growing number of other manufacturers of hobby products have achieved an annual volume of \$1-million and over.

Model airplane building still rates at the top in popularity. Model airplane builders estimate that their fans number at least 6-million to 7-million today.

With the trend to boats at last week's show, the model airplane makers may have to look to their blue ribbons. Boat fanciers will be able to buy even such luxury items as a cabin cruiser powered with either a gas engine or newly developed radio control devices. Model makers attribute the sharp turn to boat models to the wide increase of interest in boating of all kinds in recent years.

• **Price**—Prices tend to fit the hobbyist's pocketbook. Model hobbyists can spend as little as 50¢ to \$1 for a simple model kit, up to \$50-\$100 for large and elaborately detailed models equipped with model engines.

New at the show were a model diesel engine, put out by McCoy Products Co., Culver City, Calif., for model airplanes or boats, to retail for \$7.95, and a model outboard engine, made by Allyn Sales Co., Inc., Los Angeles, to retail for \$9.95.

• **Painting**—Another big hobby success, "numbered" painting (BW—Nov. 28 '53, p78), introduced for the first time two years ago, continued to grow in popularity and sales, according to hobby-dealers. Sales last year of numbered painting sets totaled \$60-million to \$80-million, the trade estimated. Retail prices range from \$1.50-\$8.95 a set. This year, numbered water colors, numbered Tole trays, and other applications of the idea are numerous.



## The big rush to help you relax

Relaxing with your favorite weekly magazine. That spells quiet enjoyment to millions of Americans. But did you ever wonder how all these magazines get to newsstands so fast? Well, here's how the biggest weekly, LIFE, handles its enormous distribution job. Every week LIFE's presses turn out over 5,500,000 copies. Between Monday when the magazines start coming off the presses, and Friday when they reach newsdealers throughout the country, LIFE and Railway Express work together closely and rapidly. Why do LIFE and many other big-circulation magazines depend on Railway

Express? Because only this nationwide rail, air and truck service can pick up, transport and deliver so many shipments to so many places in so short a time — and does so every week of the year.

The magazine business is huge . . . so are the shipping problems connected with it. But to the 45,000 Railway Expressmen the smallest shipping problem is as important as the biggest. Every shipment you forward or receive gets complete, start-to-finish service from Railway Express — extra-value service without extra cost. Call your local Railway Express Agent today.



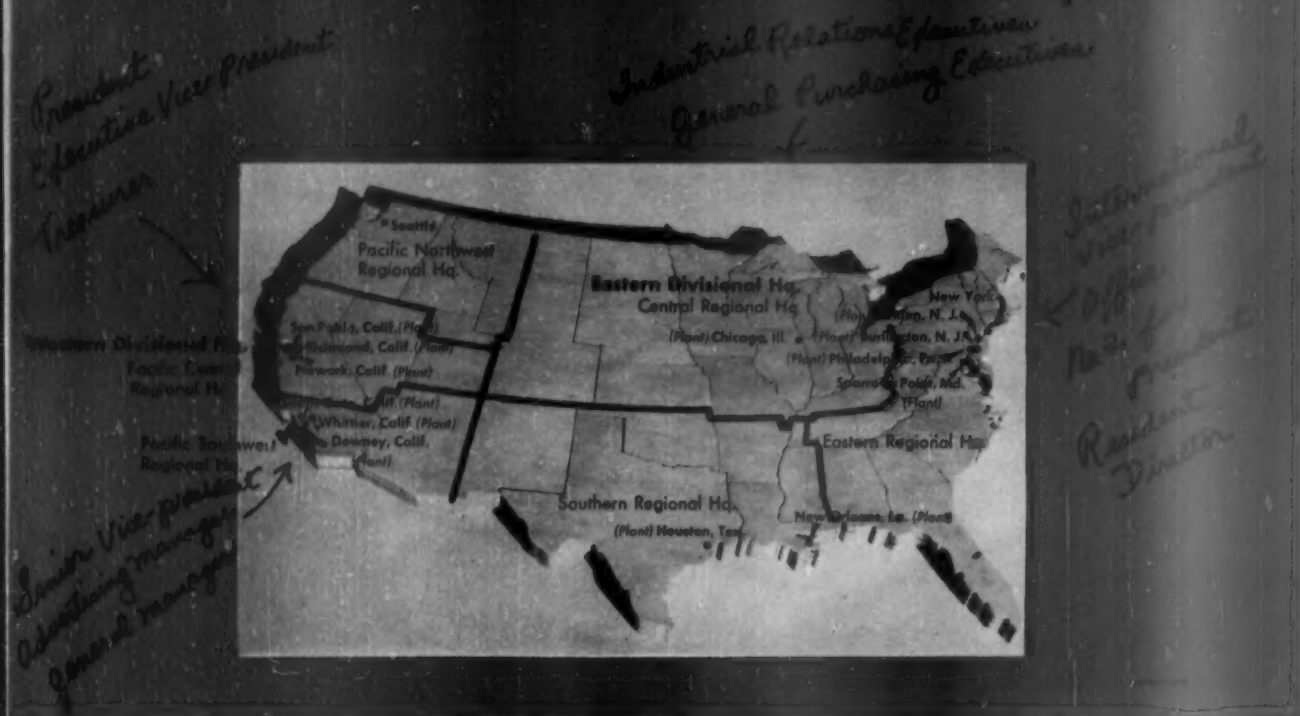
*It pays to specify the extra-value shipping service*

As a contribution in the public interest RAILWAY EXPRESS will take your orders for CARE



# MANAGEMENT

## RHEEM: Lots of Bosses—No Central Headquarters



## Top Men Are All Over the Map

"We blasted 'em apart."

Thus spoke William E. Zander, senior vice-president of Rheem Mfg. Co. He was referring to the company's executive functions in the wake of a major reorganization program. The program, started in 1952, is now complete.

And apparently reorganization was a good idea. Last week, Rheem announced these figures:

- Sales last year hit a record high—\$188-million, 30% over the figure for 1952.

- Earnings after taxes also established a record: almost \$5-million.

- Commercial sales and profits, as distinguished from aircraft and other military work, fell only slightly under the record Rheem made in 1951.

- **Setup**—The map above pictures what Zander meant by blasting the executive functions apart. Rheem is now a company without a national office. It has a headquarters—in Richmond, Calif.—but that's more or less for the record, not for operating purposes.

Like any other company, Rheem has a president and a circle of other top officers. But these officers are scattered all over the map. They don't live together in what Rheem calls an ivory tower. The international vice-president hangs his hat in New York. The senior vice-president, general manager, and national advertising manager are in Los Angeles. The industrial relations and general purchasing executives are to be found in Chicago. The president himself—and this is typical of the reorganized company geographical spread—maintains two offices, in Richmond and in New York.

- **New Twist**—Ordinarily, when a multi-product company such as Rheem decides to decentralize, it does so along product lines. General Electric did; so did Westinghouse, Carrier, Ford. But Rheem preferred to cut itself up geographically.

The reasons are in the company's history. Right after World War II, Rheem started to sell products under its own name. Before that, it had pro-

duced brand-name goods almost exclusively for other companies. The switch made sales—not production—paramount. So the sales force decided that it needed a central headquarters in New York City.

This was foreign to Rheem's nature. Its scattered plants had always operated with a fair degree of individual autonomy. But the sales force, necessarily a powerful voice in company decisions, got its way.

Before long, the New York headquarters boasted a staff of 100. And confusion raised its matted head almost immediately. All the plant managers reported to headquarters. So did all the plant sales managers—but to different men. The sales manager of a plant, however, rarely reported to the plant manager. Neither knew what the other was doing.

Rheem might have been able to fix this kind of trouble by setting up an intricate web of crisscross reports. But it knew now, as it had suspected before, that centralization was not its

no generalities...no "bait"...no subsidies...  
just simple, factual reasons why

# debt-free INDIANA

*is attracting more new industry  
per capita than any other state!*

**WHY** is Indiana up 297% since '39 in dollar value added to goods by manufacture? States ranking 1st and 2nd in total value added by mfg. are outranked *per capita* by Indiana by 38% and 26%! (Bureau of Census, '50).

**WHY** does Indiana lead its neighbor states in new-plant value per capita—by 8%, 12%, 38%, 110% and 127%? (F. W. Dodge Corp., N.Y. construction specialists).

**WHY** did Indiana industry soar 29% from '39 to '47... then 31% from '48 to '53... to a total of 10,500 industries today?

**WHY** does Indiana outrank 46 states in percentage of employees engaged in durable goods manufacture—81% over U. S. avg.? Why are U. S. ratios topped by Indiana by 193% in percentage of population engaged in motor vehicle equipment manufacture, by 152% in primary metal industries, by 87% in non-electrical machinery, by 34% in fabricated metal industries, by 29% in electrical machinery and equipment?

**WHY** is Indiana growing 59% faster than U. S. (7-1-50 to 7-1-52)? Today's Indiana population: 4,300,000 (60% urban, 40% rural).

**WHY** does Indiana rank 3rd in U. S. in steel production (and have world's largest steel plant)... why 1st in U. S. in musical instruments, gasoline pumps, refrigerators... 3rd in motor vehicles and parts... 5th in rubber... 1st in bldg. limestone (3/4 of U. S. total)... why do we have world's largest oil refinery & cement plant... why so strong in wood veneers, furniture, meat packing, farm machinery, drugs, rail cars & equipment, bottles, jars, machine shop and foundry, canning, hosiery, clothing, fibre-glass, electronics, jet engines, etc.?

**WHY** is Indiana blessed with such diversity—enough to fill most components needs here?

#### STUDY THE REASONS ON THIS PAGE

Then, when you want further specific details, we'll bring them to you in person, if you like, or mail them (in plain envelope if you so stipulate). Write or 'phone...

# INDIANA

**No State Debt.** Constitution forbids! Pay as you go. Surplus: \$80 million!

**No "Nuisance" or "Penalty" Tax.** No net income, use, retail sales, corporate or manufacturer's tax! Only a gross income tax (1/4 of 1% on gross receipts from sales for processing, re-sale, etc., not in interstate or foreign commerce; 1% on all other receipts derived in Indiana except receipts from sales to ultimate consumer, taxable at only 1/2 of 1%; no tax on receipts from sales of goods in interstate or foreign commerce).

**3rd Lowest Unemployment Tax in U. S.** Averages .7 of 1%—only half U. S. average of 1.4%!

**Lower-Cost Government**—both state and local—than in neighboring states. (Source: Wisconsin Department of Taxation).

**Good Labor**—97% native, 99.2% literate. Responsible, adaptable; 30% fewer govt. workers per capita than nationally. Most Indiana counties have more resident factory workers than factory jobs.

**Good Labor Relations.** Enviably strike and lockout records. First in U. S. with state labor-management charter.

**Low Labor Costs.** U. S. median weekly wage of mfg. employees under unemployment compensation is 7% higher than in Indiana. And Mich.-Ill.-Ohio average is 8% higher than in Indiana. (Source: U. S. Dept. of Labor, Bur. of Employment Security, 2nd quarter, '52). Families earning under \$2000 a yr. are 16% less prevalent in Indiana than nationally; from \$2000 to \$6000, 10% more prevalent; over \$6000, 10% less prevalent. Families earning under \$6000 are 5% more prevalent in Indiana than in Mich.-Ill.-Ohio; over \$6000, 28% less prevalent.

**Plenty of Firm Power.** No Indiana plant or prospect ever was lost for want of power. Cost: often as low as 1/2 of 1% of total production cost. Over 3 million h.p. a yr. (10% over per capita U. S. average) plus another 1 1/2 million h.p. for emergency (through interconnected transmission system). Increases kept well ahead of anticipated needs. Only 2%

hydro- or oil-generated—98% by coal, most of which is Indiana's own coal.

**Raw Materials.** Low-cost coal (6th in U. S., 100 rail & truck mines, enough for 2000 yrs. at present rate, 20-30 million tons yr.). Limestone (bldg. & agric.). Natural gas (billion cu. ft. yr.). Clay for brick and tile ("Clay Center of the World"). "White Clay" (rich in aluminum). Petroleum (plus more from 1000-mi. pipeline from Southwest). Water (43" rain per yr.). Sand. Gravel. Wood. Etc.

**Closest to ALL Markets.** Indiana offers industrial towns and cities closest to exact U. S. population center—mileage minimum from market maximum!

**258 Towns and Cities over 1,000**—5 over 100,000... 14 25,000-100,000... 22 10,000-25,000... 217 1,000-10,000.

**Excellent Transportation**—23 railroads (2.95% of total U. S. rail miles with only 1.22% of U. S. area—142% more than our sq.-mi. "quota"); 9 airlines; 200 airports; 300 motor freight lines; shipping to Miss. River by Ohio River and Chicago Sanitary & Ship Canal; Lake Michigan, etc. Literally "The Crossroads of the Nation"!

**Nation's Finest Highways.** No other state has both so many highway miles per area and so high a percent permanently paved (twice as many miles as neighboring states—per driver and per sq. mi.)—and all paid for!

**Living in Indiana is Easy, Worth While and Fun!** Fine housing. Modest rent. Good transportation to work. Good climate (winter avg. 31°, summer avg. 76°, mean 53°). Over 1000 lakes, streams (5th in U. S. in fishing licenses). Good hunting, conservation, 13 famous state parks, 14 state forests. Excellent public park, playground, swimming pool programs. Winter sports. Resorts, mineral springs. Finest municipal golf courses in U. S.

**Superb public schools** (1st state in U. S. to provide constitutionally for public education); fine teacher salary, tenure, retirement policies; 19 colleges, universities. Art schools, galleries. Nationally known symphony orchestras; 250 public libraries; rich in artists, writers, etc.

Chemicals

Food  
Products

Fly Ash

# DUST

- It can be Expensive
- It's Never Neighborly

Possibly you are one of the many that built 'out in the country' purposely so that operations wouldn't be a nuisance to residential areas. And then, almost before you realize it, residential areas have crept up to and surrounded your plant.

Stack dust has now become a public nuisance!

What to do about it...not merely fly ash from the boiler plant chimney but production dust from plant operations? Dust never is or can be neighborly. Often it represents a substantial—but preventable—loss of products into which manufacturing costs have already gone. In other words, a definite economic loss!

May we suggest that you look into the merits of the AERODYNE, one of industry's most efficient and flexible collectors. One of the largest utility steam plants in the country found in the AERODYNE the way to stop its fly ash problem. Several new large orders for the same plant for other sets of stacks are being processed.

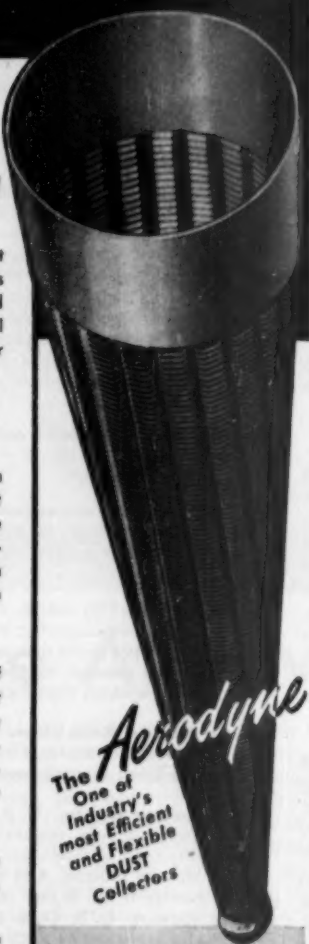
Why not have your engineering department get all the details about the AERODYNE? In writing describe the nature of your problem.

**AERODYNE DIVISION**  
The Green Fuel Economizer Co., Inc.  
Beacon New York

Foundry Cupola  
DUST  
from stack gases  
recovered by the

*Aerodyne*

The Green Fuel Economizer Co., Inc., has complete facilities in Beacon, N. Y., for analyzing and testing dusts of all types.



OPERATING BOSS William S. Rheem II watches over a widely scattered company.

dish. It had the same feeling about organizing along product lines. The thing to do, it saw, was to decentralize geographically.

• **East and West**—The company began breaking up in August, 1952. At first it tried four regional divisions. But a year later, it decided that a more logical attack would be to divide the company into east and west—with the Rocky Mountains providing the natural fence.

The youngest Rheem, William II, got the job of presiding over the reorganization as assistant general manager.

Last month, he was promoted to the post of general manager in charge of all domestic marketing and manufacturing activities.

Today, under him, the system looks like this:

William Rheem II is operating chief. The two division managers—east and west—report to him.

In each of the two divisions there are three regions. Each region must show a profit on its own hook. Each region manager reports to his division chief.

A region may have two or three plants, or just one. In the Pacific central region (of the western division), for instance, there are three plants. One makes ordnance equipment; another makes gas ranges and home heating equipment; the third, steel and fiber shipping containers and steel tanks. The central region has only one plant. It turns out steel tanks and shipping containers, air conditioning and home heating equipment, and ordnance equipment.

In all, there are 13 plants dotted through the six regions. Each plant manager reports to his region chief. Each plant, like each region and each division, maintains its own budget. It



**CHEMICAL PRODUCTS**  
**PLUS**



## How much wood would a wood pulper pulp?

... if the wood pulper were using the new ammonium bisulphite process, he'd find he would increase production considerably without capital outlay or loss of time. This advanced pulping method offers further advantages of producing pulp of higher quality, utilizing cheaper wood sources, and lessening stream pollution problems.

Currently, as more sulphite pulp producers convert to ammonia, they look to Mathieson as a dependable source of supply. Multi-plant pro-

duction—Niagara Falls, Morgantown, Lake Charles—PLUS exceptional water and rail shipping facilities, PLUS practical technical assistance—these are some of the PLUSES you get when you buy chemical products from Mathieson.



**MATHIESON CHEMICAL CORPORATION**  
Mathieson Industrial Chemicals Division  
Baltimore 3, Maryland

caustic soda • soda ash • chlorine • sulphur • sulphuric acid • bicarbonate of soda • ammonia • sodium nitrate • nitric acid  
sodium methyllate • sodium chlorite • hypochlorite products • dry ice and carbonic gas • ethylene glycols and oxide • methanol



## Skeptical strong man makes Patapar underwater test

An easier way to test the *high wet-strength* of Patapar Vegetable Parchment is to place only the Patapar underwater. Soak it for hours and hours—even boil it. Patapar will keep its amazing wet-strength.

### Resists grease, too

If grease is a problem, Patapar has the answer for that, too. It resists penetration of fats, grease and oils—a quality that makes it ideal as a food wrapper and for many other uses. In addition Patapar is NON-TOXIC.

### How business is using Patapar

Patapar is produced in different types or variations that meet all sorts of exacting requirements. Some of its

diversified uses: wrappers for butter, poultry, margarine, ham, bacon, cheese and other moist foods; milk can gaskets; rubber releasing separators; white print translucent masters for direct print machines; dialyzing membranes; in hospitals for wrapping articles to be sterilized in live steam. It is furnished in rolls or sheets, plain or beautifully printed with colorful designs.

In your business perhaps there is a job that could be done better with Patapar. Tell us about it, and we will send information and testing samples of the type of Patapar we recommend. Write today.

**Patapar®**  
Vegetable Parchment  
HI-WET-STRENGTH • GREASE-RESISTING

HEADQUARTERS FOR VEGETABLE PARCHMENT SINCE 1885

**PATERSON PARCHMENT  
PAPER COMPANY**  
Bristol, Pennsylvania

West Coast Plant:  
810 Bryant Street, San Francisco 7  
Sales Offices: New York, Chicago

**"... regions and plants act much like a group of individual businesses ..."**

RHEEM starts on p. 54

makes profits and takes losses as though it were a company unto itself.

Once a month, the president gets a statement from each of the six region chiefs. Consolidated profit-or-loss reports for the whole company are made up from these six statements.

• **Reasoning**—How does this new arrangement sit with the company's sales chiefs, deposed thus from their solitary grandeur in New York? They admit that it's working fine.

It hardly needs proving that men at the regional level know a good deal more about the fine points of selling to their particular region's customers than do men isolated in a New York skyscraper. This would be true for almost any company. It's particularly true for Rheem; the company's chief commercial products mean very different things in different regions. Air coolers, for instance, are easier to sell in the Southwest than in the Northeast.

• **Hole Filled**—One weakness in any geographical setup, though, is that no product can be kept under the watchful eye of a specialist. This product-watching is almost essential for any company that makes and markets a big array of products. Many companies consider the function so important that they wouldn't consider decentralizing according to any pattern other than along product lines.

Rheem mended this apparent weakness in its new structure by creating two small staffs—one for each division—with product coordinators for containers, plumbing and heating equipment, and major appliances. Through these coordinators, the company keeps a close check on the ups and downs of each product, and on the market currents around it.

• **Like Companies**—Except for the light-handed control of Rheem's top officers and the product coordinators, the regions and plant act much like a group of individual businesses. They buy from and sell to each other, and they're friendly to each other—but there's nothing in the contract that says they have to act that way. If a regional sales manager feels like it, he can buy his merchandise from a non-Rheem plant. It's rare that he will, however.

The regions do a good deal of trading among themselves. Rheem clothes dryers are sold all up and down the West Coast, but they're made only at one plant—the one in South Gate, Calif. They're shipped from there on orders from other regions, at factory cost plus

**WHEN SOMETHING HAS BEEN DONE A PARTICULAR  
WAY FOR 15 OR 20 YEARS, IT IS A PRETTY GOOD  
SIGN IN THESE CHANGING TIMES, THAT IT CAN  
BE DONE A BETTER WAY**

"MANAGEMENT METHODS"

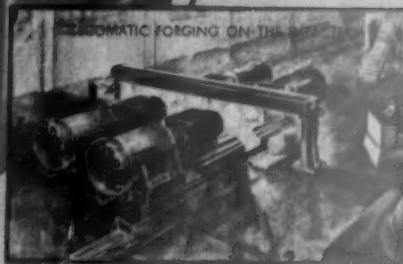
## THE IMPACTER

THE IMPACTER is a revolutionary new type of hammer that forges without shock or vibration, requiring no anvil or special foundation and can be used for manual, semi-automatic and completely automatic forging. It utilizes the high-velocity impact of horizontally opposed rams to accomplish the work, striking the stock simultaneously from both sides. This results in more uniform working of the metal than in conventional hammer forging. Dies last longer because of shorter die

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FLAT DIE FORGING ON THE IMPACTER



AUTOMATIC FORGING ON THE IMPACTER

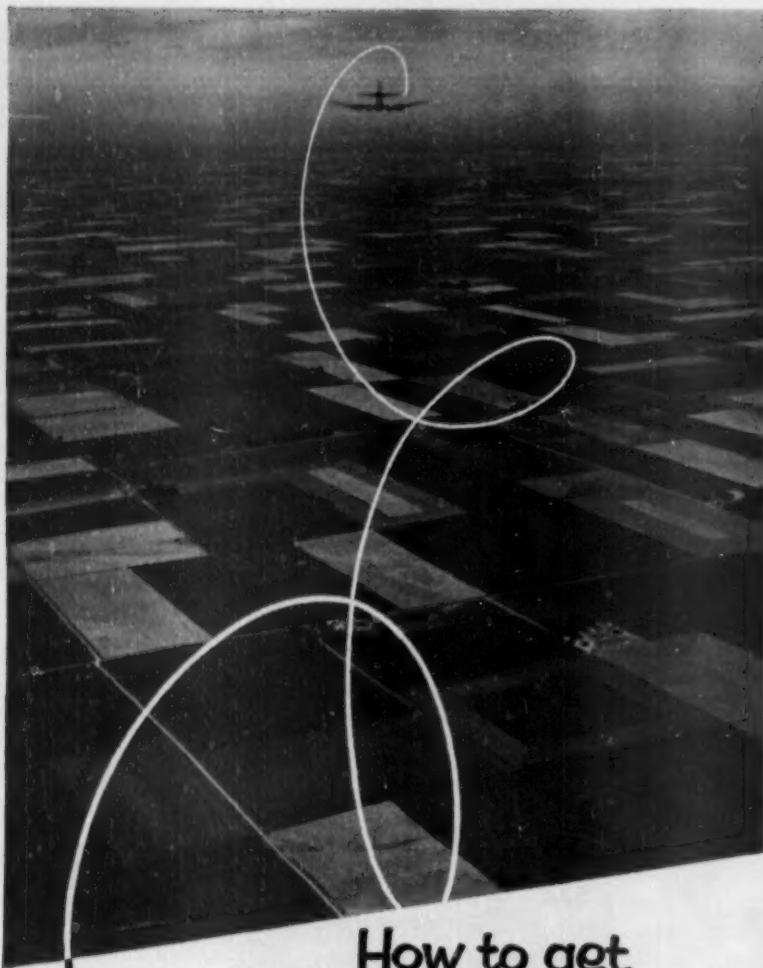
CHAMBERSBURG ENGINEERING CO.

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# CHAMBERSBURG

THE HAMMER BUILDERS





## How to get new business that's hard to deliver!



**BETTER  
SERVICE** will  
be your best  
sale's tool in

the tough competitive

months ahead. Take this case: A printing customer of ours, looking for new business outside his usual territory, found a prospect. But to get the new business order he had to guarantee delivery of a prospectus of a stock issue to 1200 underwriters, in 400 cities, within 24 hours. We said we could do it, and he sold his prospect. Proof: 1200 messages confirming delivery!

Maybe you'll never have to handle a job like this but the ability to do so is the reason so many of America's major

corporations have made Emery a factor in their plans. Emery provides the BIG-3 "musts" in moving goods—control, predictability, maximum speed.

Emery service includes these unique features that will enable you to meet growing competition... pickup and delivery, day or night... "fire department" runs... individual shipment control for tracing reports... delivery forecasts... Air Procurement and Timed Delivery services, special Assembly and Distribution privileges.

For this kind of Premium Service you would naturally expect to pay premium rates. But you may be paying more right now for ordinary service. Call us and get all the facts.

"Air Freight For Better Business"



**EMERY AIR FREIGHT CORPORATION**

New York 17: Offices or agents in all major cities and towns in the United States, also serving Alaska and Canada.

**"... the upshot was that  
many of the top men's ideas  
were dropped ..."**

RHEEM starts on p. 64

administration expenses and a fixed fee. Once shipped, the product belongs to the region that ordered it. The region must freight it, warehouse it, advertise it, and—if it values an attractive balance sheet—make it pay.

There's flexibility in this arrangement. Suppose a region wanted to sell the clothes dryer in the Midwest. It might be able to talk the South Gate plant manager to shade the factory cost, thus washing out some of the added freight expenses. This would let the Midwest sales manager compete with locally built brands. But he'd have to make the deal attractive to the manager at South Gate, who has his own profit-and-loss statement to worry about.

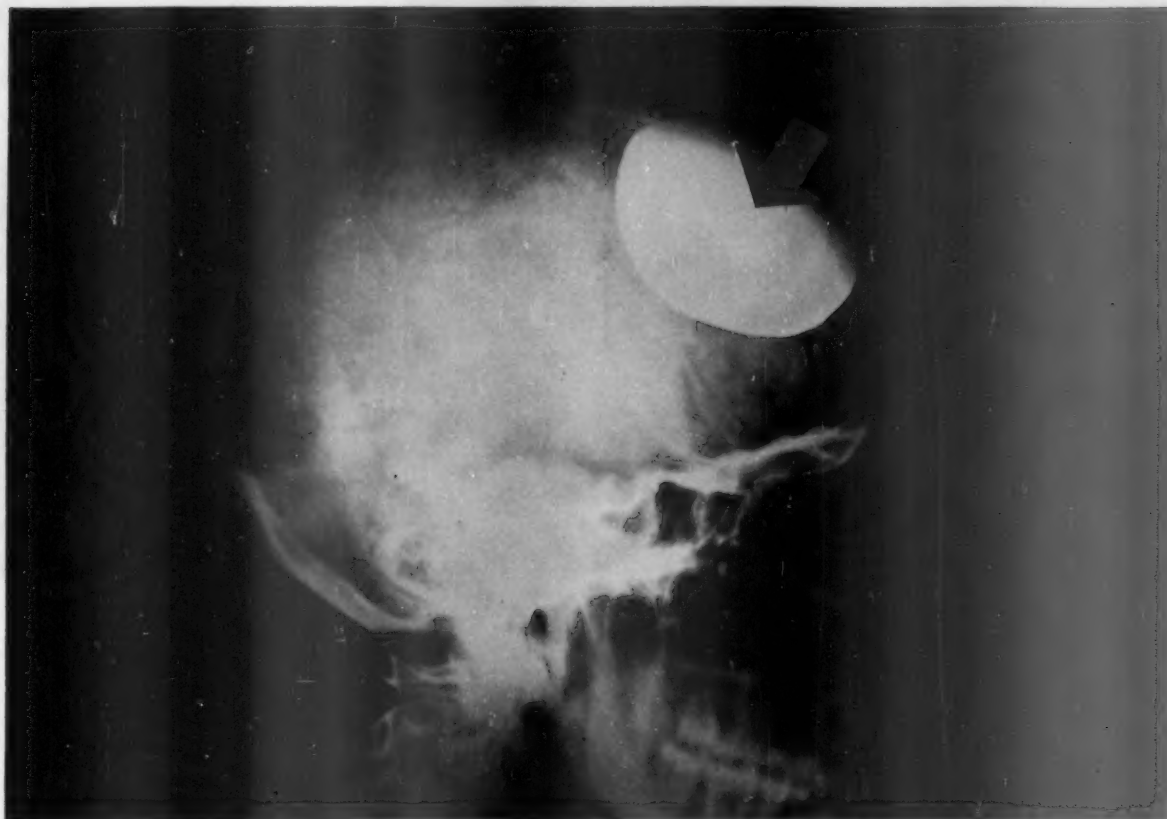
• **All Together**—Rheem's far-flung bosses get together once in a while, perhaps partly to prove to themselves and the public that they're really parts of a single company. In December, 50 corporate, divisional, and regional chiefs met in Chicago.

The regional chiefs were lowest in rank at this meeting, but that doesn't mean their ideas are taken lightly. At one time, they advised the higher officers to go slow on some of their ideas for new products. Their argument: "Let's settle on what we have. We have competition to worry about—on heaters, from A. O. Smith, Day & Night, and a few others. On steel drums, it's U.S. Steel."

The upshot was that many of the top men's ideas were dropped.

• **Settling**—Rheem's regional managers probably had good reason for wanting to settle down. Since the end of the war, the company has gone deep into the appliance field—with perhaps 30% of its sales—with brand-name water heaters, home heating equipment, air conditioning, kitchen ranges, clothes dryers. It's also a big aircraft subcontractor, and recently bought 30,000 shares of Northrop Aircraft, Inc., in order to place a man on its board. (It has a separate aircraft division that operates outside the commercial product setup.) Now top management has decided to consolidate the company's structure by going into the automotive field—where it has never had a substantial foothold—by buying United States Spring & Bumper Co.

Rheem's expansion has kept regional chiefs busy, and promises to continue doing so. For that reason, the regional men are in favor of a long, hard look at any new product before it's put into production.



**NEWEST** of CARBORUNDUM's "man-made minerals" is zirconium carbonitride, product of the electric furnace, and first step in CARBORUNDUM's processing of metallic zirconium. Prodigious indeed are the applications of this corrosion-resistant, fantastically strong, extremely tough wonder metal: in cranial and orthopedic surgery... in industry, for chemical tank linings, pumps and piping—as gaseous sponge in high-vacuum equipment—for

structural parts of atomic power plants. The production process also yields vast quantities of important by-products, including zirconium tetrachloride, a remarkable chemical catalyst, and also used in the tanning of leathers—as well as chemically pure anhydrous magnesium chloride which has valuable reagent properties. On any or all of these products, we invite your inquiries.

Product of our subsidiary, CARBORUNDUM METALS CO.

## Where's the limit to what you can do with CARBORUNDUM's "man-made minerals" ?



**THREE SUPER REFRACTORIES** combine to give the operator of this ceramic kiln car high-production, long-life performance:

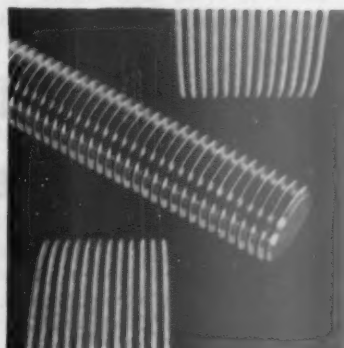
CARBOFRAX® silicon carbide tile for high hot strength and heat shock resistance;

ALFRAX® 81 aluminum oxide brick for insulation and low heat loss;

MULLFRAX® electric furnace mullite shapes for load strength. *Made by the Refractories Division*

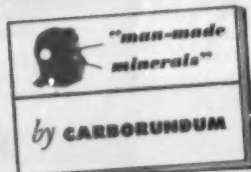
**THREAD GRINDING** is another of the many fields in metal-working where the accuracy possible only with grinding has almost completely outmoded the conventional forming methods of only a few years ago. CARBORUNDUM's pioneering development of a complete line of Thread Grinding Wheels, in single-rib and multi-rib variations, has been a major factor in this art.

*Made by the Bonded Products and Grain Division*



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describing how imaginative thinking—yours and ours—can put "man-made minerals" to work for you. Write for it on your business letterhead. No obligation, of course.



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Manufacturers of Refractories • Heating Elements • Resistors • Metal Additives • Grinding Wheels • Coated Abrasives • Sharpening Stones • Abrasive Grains



EXECUTIVES of the paper business, in New York for their annual convention, were guests of American Cyanamid and American Broadcasting at a new kind of program.

## Paper Industry Sees Itself on Television

Last week Arnold Stang (picture at top), the bespectacled young needler on Milton Berle's television show, found himself in a brand-new role. He was fronting for the paper industry.

Stang, and WABC-TV's Taylor Grant—plus a bevy of models, directors, stage hands and technicians—exolled the trade for half an hour in a live TV show over Channel 7, New York.

The show was another step in industry's progressive use of this era's glamor medium for public relations (BW—Jun.13'53,p48).

After the show, just about everybody connected with it was pretty happy.

• **Executives**—American Cyanamid Co., co-sponsor of the program with American Broadcasting Co., got an audience of top-level paper executives in the theater. It also earned their goodwill for sponsoring an institutional half-hour plus for their industry in the New York metropolitan area. American Cyanamid is one of the industry's chief suppliers of chemicals.

Paper men liked it. The American



Comedy . . .



. . . Cheesecake . . .



. . . Fashion . . .



. . . Home



## XEROGRAPHY AT BELL AIRCRAFT CORPORATION SPEEDS PAPERWORK!



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Forms, letters, bulletins, charts, graphs, manuals, engineering drawings, government regulations or anything written, typed, drawn or printed can be reproduced with photographic accuracy in about 3 minutes on to an offset paper

master for run off of multiple copies on an offset duplicator. Original copy may be enlarged, reduced or reproduced same size by xerography in XeroX Lith-Master® copying equipment. With xerography, copies can be made from one or both sides of original material.

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There is no limit to the versatility of the dry, electrostatic, direct positive xerography process in paperwork duplicating applications.

\*A trademark of The Haloid Company

**WRITE** for "proof of performance" folders showing how companies of all kinds are cutting costs and saving time with xerography. For instance: Certified Grocers of California, Ltd., saves \$15,000 a year on Price List Order Book alone. H. L. Green Co., Inc., saves \$9,600 a year and speeds merchandise information and price lists to its chain of stores.

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America

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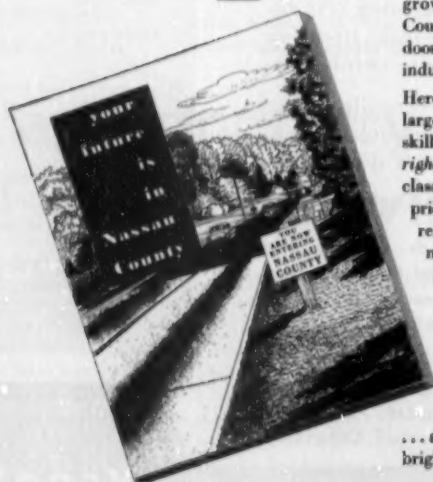
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## NORTHWEST Orient AIRLINES



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Industrial Development Department B-1

250 Old Country Road, Mineola, Long Island, N. Y.

"... sure, sure, we know:  
You get a tree, chop it up,  
and flatten it out..."

PAPER INDUSTRY starts on p. 72

Pulp & Paper Assn. and the Technical Assn. of the Pulp & Paper Industry happened to be in New York—several thousand strong—for annual conventions. The show gave their conventions a lot of publicity.

It gave WABC-TV a glimpse of what might be a new field—industrial public interest shows with suppliers as sponsors.

• **Growing Interest**—Actually, industry seems to be growing more and more interested in TV's possibilities as a public relations medium. There is the Aluminum Co. of America's sponsorship of Edward R. Murrow's *See It Now* on CBS (BW—Dec. 19'53, p115) and ABC's earlier effort, the unsponsored *Meet the Boss* program, which many agreed was a good idea not very well executed (BW—Aug. 16'52, p110). Then there is the National Assn. of Manufacturers' *Industry on Parade* television film series.

On ABC's San Francisco station, KGO-TV, Richfield Oil Corp. is sponsoring a half-hour weekly series, which takes the TV viewer to plants on the West Coast. Called *Success Story*, the show is a goodwill and educational gesture by Richfield for industry as a whole—and could very easily produce sales for Richfield in the process.

Besides this, closed-circuit TV has been catching on more and more for intracompany affairs like sales meetings.

Last week's ABC show—called *Life With Paper*—was one of the few times that an industry association has got its story on TV pegged to its annual convention. ABC executives figure there is plenty of this kind of business to be had in our convention-minded country.

• **The Pitch**—As for the show itself, it was light and obviously slanted to the woman of the house—although there were enough models in paper bathing suits to catch the male eye.

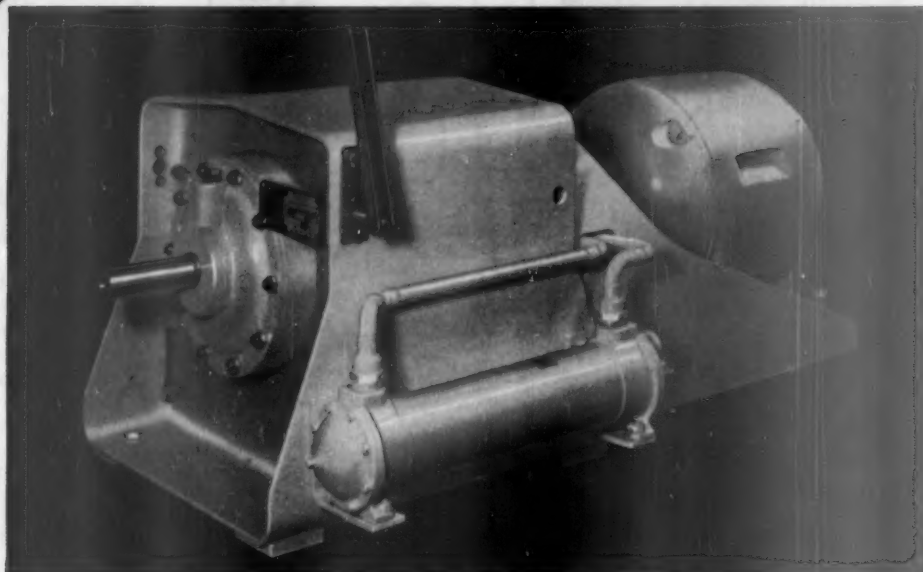
The paper industry has been far from a laggard in institutional campaigns, especially in its use of films. But, as Stang put it: "Sure, sure, we know. You get a tree, chop it up, and flatten it out, we know"—obviously referring to the somewhat hackneyed industry movie technique of "how you make a piece of paper."

So, instead of the ordinary treatment, the script kept technology to a minimum. In its place was the consumer theme: Already you can't do without paper—and that will be more so in the future.

## ANNOUNCING THE NEW AMERICAN BLOWER

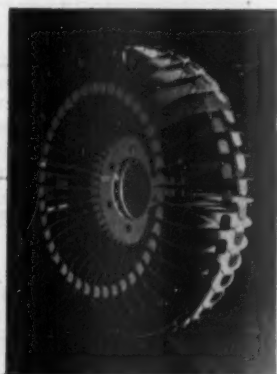
# *Gýrol* FLUID DRIVE

TYPE VS CLASS 2



American Blower Type VS Class 2 Gýrol Fluid Drive

- Can be reversed while in motion at any variable operating speed by merely reversing direction of rotation of motor
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A phantom view of the driving and driven members, which provide smooth, reversible power transmission.

**H**ERE IT IS! A brand-new fluid drive that will help you solve many tough industrial-drive problems. It's the American Blower Type VS Class 2 Gýrol Fluid Drive. A compact, self-contained, adjustable speed unit.

The result of years of development and research, this adjustable-speed fluid coupling is crammed with features. It has unlimited application possibilities, with its wide-range, stepless speed, reversible control. Even on constant-torque loads, a 4-to-1 speed range is obtainable!

It permits driving motors to reach full-load speed before engaging the

load. In many cases simple across-the-line starting may be used. Adjustable speed may be obtained by either automatic or manual adjustment of the speed-control lever.

The new Type VS Class 2 Gýrol Fluid Drive is available in six sizes . . . 7½ through 800 h.p., at normal motor speeds up to 1800 r.p.m. Built in five standard arrangements, it can be used on a wide variety of industrial applications.

For complete information about the Gýrol Fluid Drive line, give your nearest American Blower Branch Office a call, or write us direct for free literature.

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CANADIAN SIROCCO COMPANY, LTD., WINDSOR, ONTARIO  
Division of American Radiator & Standard Sanitary Corporation

For smaller applications the Type TM Constant Speed Gýrol Fluid Drive is available in ratings from 1 to 20 h.p.

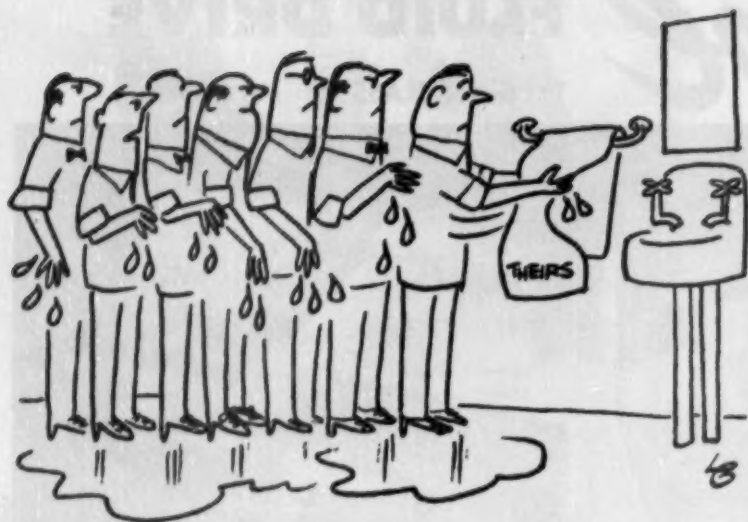
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You'll find ScotTissue Towels have an exceptionally high fiber content. This "bulk," plus generous size and double fold, makes a case of 3,750 ScotTissue Towels weigh 46 lbs.\* Now some paper towels cost less for 3,750 but are from 10 to 20 lbs. lighter\* per case—hence you get less drying power. Write for more facts. Scott Paper Company, Dept. BW-7, Chester, Pa.

\*Shipping weight

**SCOTTISSE**

"ScotTissue," Reg. U. S. Pat. Off.



**TOWELS**

Symbol of the  
right kind of washroom

## Siphoning Engineers Into Metallurgy

The American Institute of Mining & Metallurgical Engineers is launching an educational campaign in colleges and universities to head off the sharp decline in the number of new engineers entering the extraction industries.

Last week, the new president of the institute, Leo F. Reinartz (an Armco Steel Corp. vice-president), said that not only is the total supply of new engineers dangerously low, but mining and metallurgy are getting a smaller proportion than their usual one-third. He said that only 19,000 engineering graduates will become available to all industries this year, as compared with 30,000 in 1952 and 23,000 last year. Meantime, the demand for engineers is growing constantly.

• **Objections**—Reinartz cited two principal reasons why young engineers are turning from mining and metallurgy:

• They don't like the idea of working underground, and have misconceptions about the dangers involved.

• Union policies in the industry place heavy emphasis on seniority, making it difficult for young men to get started. A like situation exists in railroading, which is having an even more difficult time recruiting collegians (BW—Feb. 20 '54, p86).

## MANAGEMENT BRIEFS

Suggestions brought Serval employees \$15,868 last year, the largest amount awarded since the start of its suggestion program in 1935. Employees with ideas batted .263 for the year, turning in 1,238 suggestions and having 326 accepted and paid for.

American Woolen's clerk and general counsel, Robert H. Montgomery, will retire Apr. 1, and resign from the board of directors. The company, which is in the midst of a critical proxy fight (BW—Jan. 23 '54, p160), now has but two executive officers, Francis W. White, president, and George E. MacLellan, Jr., vice-president and treasurer.

**Problem Drinking . . . and Industry** is the title of an all-day conference to be held in New York's Hotel Biltmore, Mar. 3. The Commerce & Industry Assn. of New York is a sponsor.

**Managing Company Airplanes**, a report published by National Industrial Conference Board, sets range of operation costs from \$18 per flight-hour for a Beechcraft Bonanza to \$380 for a converted B-23 Dragon.

## WHAT DO THESE INDUSTRIES HAVE IN COMMON?

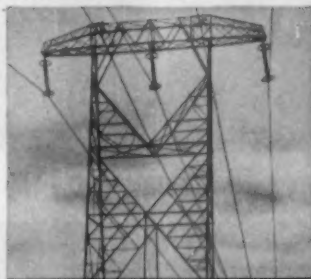
They have all called on Ebasco for services involving engineering, construction, or business consultation. In addition to these nine major industries, Ebasco has served many others both here and abroad.

The help provided by Ebasco varies with the requirements of the client. One project may call for the complete design and construction of a new plant. Another may require assistance on new financing, space planning services, a marketing and distribution study; or perhaps an industrial relations program. Still others may include advice on insurance, on tax problems, or on accounting systems and methods.

Whatever the problem, Ebasco applies to it the services of specialists . . . men of broad experience and recognized technical competence. Besides saving executive time, Ebasco saves you the expense of adding high-cost talent to your permanent payroll.



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RAILROADS ..... 6 Companies Served



AVIATION ..... 6 Companies Served



GAS ..... 91 Companies Served



STEEL ..... 10 Companies Served



BANKING ..... 10 Companies Served



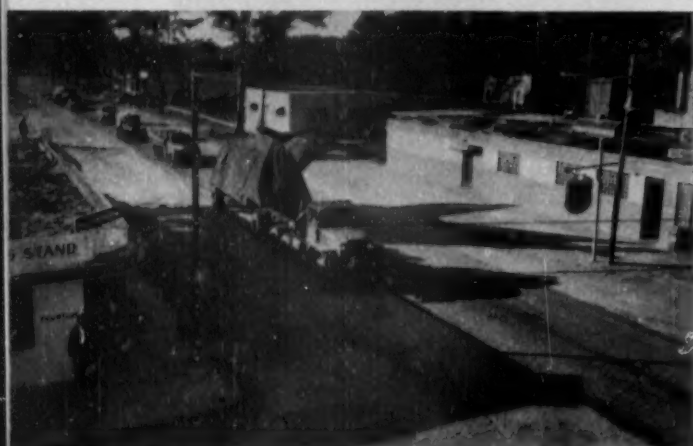
Our booklet—"The Inside Story of Outside Help"—tells the full story of Ebasco special services and how they may be of use to you. For a copy, without obligation, write or phone Ebasco Services Incorporated, Dept. A, Two Rector Street, New York 6, N. Y.

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*Ebasco Teamwork gets things done  
anywhere in the world*



# MUNITIONS



Test missile rolls through Florida resort town at dawn. On the beach, its nose is turned skyward



**PILOT** in underground bunker guides the "bird" with delicate electronic controls.



**TRACKERS** 180 mi. away at Grand Bahama Island watch approaching missile with radar.

## Slowly, Surely, Guided Missiles

The guided missile test shot pictured above went more smoothly than most. At Patrick Air Force Base, the guided missile test center near Orlando, Fla., a more typical shot will involve one of the many more advanced and still experimental weapons now in the works.

Midnight, a few weeks ago, finds the base getting ready for such a test, scheduled for seven in the morning. Ci-

vilian and military crews report to their stations. Test pilots and engineers, representing the manufacturers, are on hand, quietly tense.

In another seven hours, if all goes as scheduled, a missile will be fired out over the ocean. The missile (more often referred to as a "bird") has been built with loving care. It's one of the most complex flying machines ever

assembled—a product of the most advanced thinking in the fields of electronics, hydraulics, mechanics, aerodynamics, combustion engineering, radio, metallurgy.

It's so intricate a mechanism that not even the engineers who built it know how it will perform. A thousand things could go wrong with it. It has only one chance to prove itself,





and seaward. It blasts into the air. Will it perform well? Missile men below wait tensely.



**MAP MEN** make entries on huge transparent chart that represents the firing range.



**CAMERAMEN** follow missile from beach with a fantastically high-speed movie camera.

## Learn to Behave

for there is no way of bringing it to earth without destroying it. The hour is almost at hand.

• **Count-Down**—Every responsible officer and civilian at the test center has a copy of the count-down timetable, the detailed schedule for this particular firing. Unless every instrument, every component checks out perfectly to a dozen different last-second tests, the

count-down stops until things are made right.

It's almost dawn when a crew in the hangar makes a final check on the missile to be fired, loads it on a truck-trailer—in a hurry because things are running behind schedule. With the shrouded missile, the convoy sets out from Patrick Air Force Base proper and heads roughly 9 mi. north, through the

resort town of Cocoa Beach (picture) to the cape where the missiles are launched.

The truck pulls out onto the firing pad, and a hoist lifts the bird onto a simple Y-shaped metal arrangement that raises the missile's nose skyward. Wings are locked in place. From an underground tunnel, technicians plug in the umbilical cable cord that connects the missile to the underground bunkers, to the recording apparatus, the cameras, the electronic gear, the radar tracking

# Keep Walls Dry

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(Attach coupon to your letterhead or business card and mail today!)

**"... 'Too bad,' mutters a major to the colonel, 'that's three bloopers in a row' ..."**

MISSILES starts on p. 78

equipment. All are timed to the spark that fires the missile.

At the huge central control building, a couple of miles back from the firing pad, there's a large room that resembles more than anything else the CIC—combat information center—of an aircraft carrier. One wall is a huge transparent map and plotting board, with the borders of the missile range in red. About a dozen officers or civilians are checking out their own "consoles"—gray metal desks fitted with banks of instruments, each telling some bit of information about the bird or the firing range.

• **Delays**—A loud-speaker booms out "X minus 120." Dawn has come, and it's still two hours before the scheduled firing time. But there have been delays.

Time and time again, the speaker has boomed out halts to the count-down. Delay at the Patrick hangar, getting the missile checked out for the trailer. Delay at the firing pad, getting proper response from a piece of tracking equipment. Delay 180 mi. east at Grand Bahama Island (GBI)—the other end of the firing range, whose men and instruments and speakers are an integral part of the whole.

"X minus 60." Only an hour to go. A colonel chews his cigar, barks at an MP who gets in his way. The men are busy talking, checking, phoning, re-checking, scanning the firing schedule.

"X minus 10." Two dozen men at central control and a dozen at the firing pad feel the tension growing.

"X minus one minute—minus 60 seconds." One minute. It really hurts to stop the count-down now; but time is stopped once more while a contact is checked, a pin rammed home again, a needle brought up to its proper voltage reading.

At central control, the "in-flight safety officer" waits nervously for the count to start again. His job is to push the button that "destructs" the bird if it can't be kept on course. There's another in-flight safety officer at GBI down-range—ready to take over from the company's test pilot if he can't control the bird when it reaches GBI's radar scopes.

"X minus 30 seconds . . . X minus 25 . . . X minus 10." The count-down can't be stopped now.

"Five . . . four . . . three . . . two . . . one . . ." The bird blasts off.

Three minutes later, it's all over.

"Too bad," mutters a major to the

colonel. "That's three bloopers in a row for them."

• **Post Mortem**—The bird plunged into the sea about 50 mi. out—nowhere near the target area off GBI. It took countless hours of painstaking labor to build, and in three minutes it's finished, a dud, a bum, a stinker. All that's left of No. 345854—maybe a \$50,000 or \$100,000 piece of flying machine—is a few miles of magnetic tapes bearing the record of information telemetered to and from the bird, a few miles of film from a half dozen fantastically high-speed cameras, and a huge feeling of frustration.

The colonel re-lights his cigar, pushes his cap farther back on his head, and says: "You know, I've fired dozens of these things, but my stomach muscles got just as tight on this last one as they did on the first one. You never get over it."

Down at the bunker, a test pilot gathers his crew around him. They begin playing back the shoot. They listen to the tape recordings of every word spoken over the public address system, the questions, the answers, the reasons given for the time stops. They play back magnetic tapes that make the needles dance the way they did during the count-down, up to the time the bird took off and for the short minutes until it conked out. That same day, the manufacturer gets a quick report on what went wrong. A day or so later, he'll get another quick report—a little more detailed. A month or so after that, he gets a thick volume of charts and graphs—many of them the product of Patrick's own "Florida Automatic Computer." His own slide-rule men can look these over, perhaps extract some tiny fragment of information that will help make the bird's descendants fly better.

## I. Missile Strategy

You don't have to live in Cocoa Beach to be aware that missiles have become a hot item in military strategy. Publicity given to the missiles has been tremendous. Each of the armed services has been eager to tell as much about its own missile program as security regulations permit. The casual observer might well get the idea that the era of push-button warfare is just around the corner.

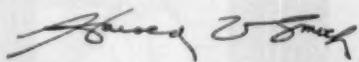
It isn't. The tests by Cocoa Beach, if nothing else, are proof of that. Furthermore, missile defense of the U.S. is just too expensive to buy at this time.

But that doesn't mean guided missiles are merely scientific toys. Usable birds have been developed; some are even in limited production. And the race to improve them is desperate. Both the U.S. and Russia know how to make an atomic bomb. If a war

# A neighborly enterprise makes its Annual Report

IN EARLY TIMES before man had developed enterprises to provide security against loss by fire and other perils, the community-at-large lacked stability. Without a dependable system of insurance, the well-being of its merchants and citizens was constantly endangered by the hazards of chance and the threat of disaster.

Today, property insurance offers dependable financial security to the public. It is provided, in its most efficient form, by agents and brokers, independent businessmen in every community who are friends and neighbors as well as advisors to their policyholders. Behind its local representatives stand the strength and stability of The Home which has enjoyed the distinction of serving American property owners for more than a century.



PRESIDENT

## Balance Sheet, December 31, 1953

### ADMITTED ASSETS

United States Government Bonds . . . . .	\$ 71,964,673.86
Other Bonds . . . . .	90,970,307.64
Preferred and Common Stocks . . . . .	150,854,115.00
Cash in Office, Banks and Trust Companies . . . . .	35,909,076.68
Investment in The Home Indemnity Company . . . . .	14,513,554.00
Real Estate . . . . .	6,868,322.19
Agents' Balances or Uncollected Premiums, less than 90 days due . . . . .	20,080,648.46
Other Admitted Assets . . . . .	5,860,915.65
Total Admitted Assets . . . . .	<u>\$397,021,613.48</u>

### LIABILITIES

Reserve for Unearned Premiums . . . . .	\$176,869,947.00
Unpaid Losses and Loss Expenses . . . . .	34,806,349.36
Taxes Payable . . . . .	7,550,000.00
Reserves for Reinsurance . . . . .	1,457,663.89
Dividends Declared . . . . .	2,000,000.00
Other Liabilities . . . . .	4,973,203.10
Total Liabilities . . . . .	<u>\$227,657,163.35</u>
Capital . . . . .	20,000,000.00
Surplus . . . . .	149,364,450.13
Surplus as Regards Policyholders . . . . .	<u>\$169,364,450.13</u>
Total . . . . .	<u>\$397,021,613.48</u>

NOTE: Bonds carried at \$3,752,632.57 amortized value and Cash \$82,500.00 in the above balance sheet are deposited as required by law. All securities have been valued in accordance with the requirements of the National Association of Insurance Commissioners. Based on December 31, 1953 Market Quotations for all bonds and stocks owned, the Total Admitted Assets would be \$396,941,070.90 and the Surplus as Regards Policyholders would be \$169,284,715.63.

★ THE HOME ★  
*Insurance Company*

FIRE • AUTOMOBILE • MARINE

Home Office: 59 Maiden Lane, New York 8, N. Y.

The Home Indemnity Company, an affiliate, writes Casualty Insurance, Fidelity and Surety Bonds

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## "CASE" HISTORIES FROM ATLAS PLYWOOD'S SHIPPING CONTAINER CLINIC

(Safe-Transit Certified)

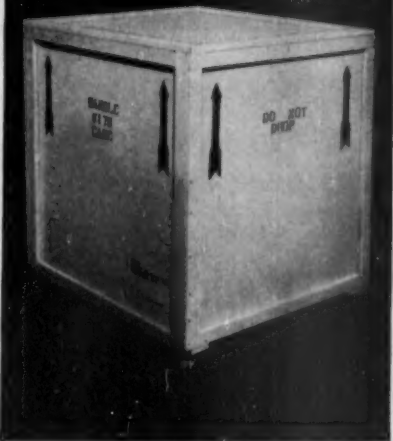
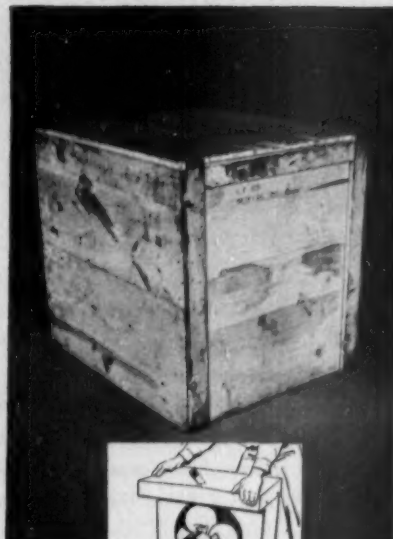
New case designed by Atlas Plywood engineers weighs 47% less than previously used wooden box . . . holds contents more securely . . . reduces shipping costs

## THIS CASE WASTED MONEY

This cumbersome wooden box was the container previously used for shipping a unit cooler\*. On arrival at the Atlas Plywood Shipping Container Clinic, the gross weight of box and contents was 220 pounds. Because of inadequate blocking, the cooler was loose in the box.

## THIS CASE SAVED MONEY

After thorough laboratory investigation, Atlas Plywood engineers designed this plywood case. Much stronger, and with more secure blocking than the old wooden box, it is a safer shipping container. And being 47% lighter than the box—41 pounds as against 77 pounds—it reduces the gross weight by over 16%, for a considerable cut in shipping costs!



\*Cooler made by  
Bush Manufacturing Co., West Hartford, Conn.

### CAN YOUR SHIPPING COSTS BE CUT?

There's one sure way to find out. At no cost or obligation to you, your present shipping containers can be tested in the Atlas Plywood Shipping Container Clinic, on equipment that simulates all conditions of actual transit. If improvements are needed in your container design, Atlas Plywood engineers will submit them for your approval.

It should then be pretty clear to you whether you can reduce your shipping costs, including what you pay for shipping the container and what you pay for damages.

This free service by Atlas Plywood — the greatest name in plywood — includes an invitation to come along and watch the tests. Your Atlas Plywood representative (see Classified Telephone Directory) will be glad to make the arrangements. Or write to Atlas Plywood Corporation, 1432 Statler Building, Boston, Mass.

# Atlas Plywood

CORPORATION

FROM FOREST TO FINISHED PRODUCT



PLYWOOD CONTAINERS • FLUSH DOORS • HARDWOOD PANELS

"... can reach miles high to deliver a warhead with tremendous speed and accuracy . . ."

MISSILES starts on p. 78

should break out, the side that had the best means of delivering the bomb would have an undeniable advantage.

• **State of the Art**—The ultimate missile—the one long-range military thinkers have in mind—is the intercontinental weapon capable of delivering an atomic bomb anywhere on earth. Certainly, any such missile is at least five or 10 years away. In the meantime, U.S. missiles are tactical—useful only in support of conventional methods of warfare: an aid to fighter and bomber pilots, Navy ships and submarines, and the soldier on the ground.

Here's how the missile fits into military planning as a tactical weapon for each of the services:

**Air Force:** Today's fighters and bombers are so heavily armored, and so fast, that they are hard to hit and knock down with existing guns and rockets. Air-to-air rockets so far haven't been good at all. But a guided missile like the Falcon is the answer to the fighter pilot's prayer. From 5 mi. away, he can make a hit that will knock the enemy out of the sky—something he has never been able to do before.

**Army:** Antiaircraft guns have never been very satisfactory against high-flying bombers; millions of rounds are fired per hit. But, given a missile like the Nike—which thinks for itself as it goes—antiaircraft groups can reach miles high to deliver a warhead with tremendous speed and accuracy.

**Navy:** A submarine today is still a craft dangerous only to other ships and submarines. But the guided missile opens up vast new possibilities in ship-to-shore warfare. With guns, a sub can only peck away at shore installations; with a guided missile, the Navy figures, its ships and subs can attack targets hundreds of miles inland—something that the Air Force once claimed as its own.

• **Plans**—Boiled down, missiles fit into war plans about like this:

For the war that's five or 10 years off, top Pentagon planners can only vaguely rough in how missiles might be used; it all depends on how fast technical development comes along. In the meantime, about all you can do is pour in funds as fast as the technical equipment and technical brains can absorb the additional money.

For the war that's fought in, say, five years or less, you can expect something like this: The limitations of missiles that we hope to have are such that we

# Center of Industry

*...if you manufacture, sell, or ship..*

*"Set your Site" in Greater Philadelphia*

Greater Philadelphia is the "natural" industrial center of the country. Main rail lines and modern highways radiate from its great seaport. Here, too, is one of America's newest air terminals. Giant steel mills provide unequalled opportunities for fabricators. Markets for finished goods are easily accessible. Within overnight reach of one-third of the U.S. population, with a large concentration of home-owning workers, with ample, dependable electric power now and for the future... booming Delaware Valley, U.S.A., invites you to join its forward march.



## PHILADELPHIA ELECTRIC COMPANY

*serving the world's greatest industrial area, Delaware Valley, U.S.A.*





## **Tapping 4,500,000 tons of pig iron a year from twelve giant blast furnaces**

The blast furnace is the largest single facility used in the manufacture of steel products. In its seething interior, a mixture of coke and limestone wrests iron from its native ore. Pictured here is one of National Steel's two newest blast furnaces being tapped to send a white-hot stream of molten iron on its way into the steel making cycle. This iron, when combined with scrap and other ingredients in huge open hearth furnaces, will become steel.

These two blast furnaces are important additions to National's facilities, for they have increased production of iron by approximately a million tons a year.

At the plants of National's divisions at Detroit, Weirton and Buffalo there now is a total of 12 blast furnaces, with a combined capacity of 4,500,000 tons of pig iron annually.

Increased pig iron capacity is but one phase of the expansion which has covered the full range of National's operations from raw materials to finishing facilities . . . from great new coal and iron ore properties to new equip-

ment of the many kinds required to manufacture National's wide range of steel products.

National Steel now has a steel making capacity of 6,000,000 tons a year. Plans for further development involve a program now in progress which will carry on over the next three years.

This is National Steel—entirely independent, completely integrated—one of America's leading steel producers.

**NATIONAL STEEL**

GRANT BUILDING



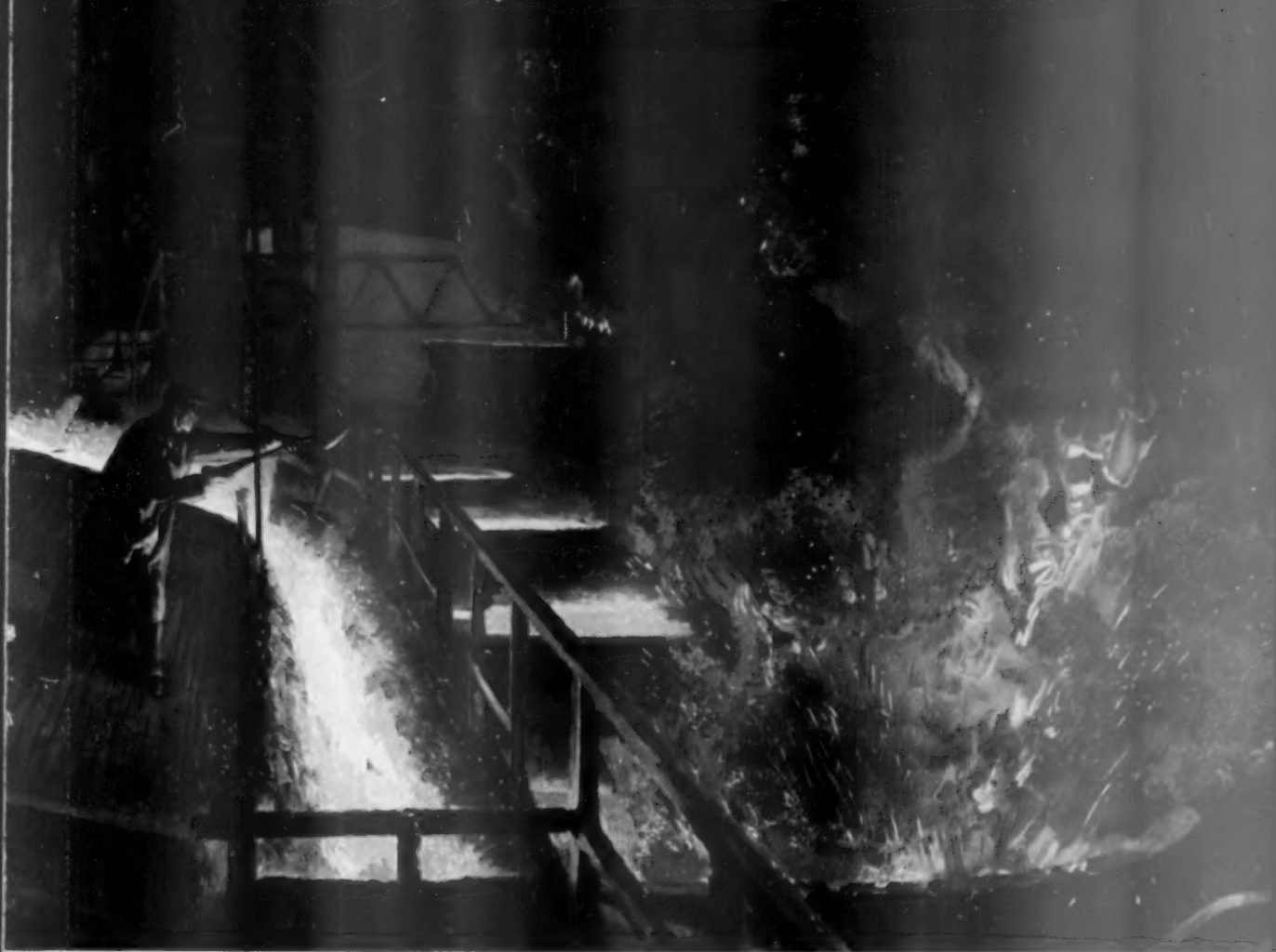
**CORPORATION**

PITTSBURGH, PA.

**AN INDEPENDENT COMPANY OWNED BY MORE THAN 19,000 STOCKHOLDERS**



# *This is National Steel*



## SEVEN GREAT DIVISIONS WELDED INTO ONE COMPLETE STEEL-MAKING STRUCTURE



### GREAT LAKES STEEL CORP.

Detroit, Mich. A major supplier of standard and special carbon steel products for a wide range of applications in industry.



### WEIRTON STEEL COMPANY

Weirton, W. Va. World's largest independent manufacturer of tin plate. Producer of many other important steel products.



### STRAN-STEEL DIVISION

Ecorse, Mich. and Terre Haute, Ind. Exclusive manufacturer of famous Quonset building and Stran-Steel nailable framing.



### HANNA IRON ORE COMPANY

Cleveland, Ohio. Producer of iron ore from extensive holdings in the Great Lakes area.



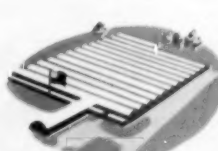
### THE HANNA FURNACE CORP.

Buffalo, New York. Blast furnace division for production of various types of pig iron.



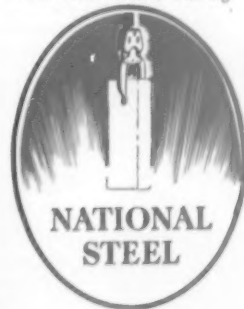
### NATIONAL MINES CORP.

Supplies high grade metallurgical coal for the tremendous needs of National Steel mills.



### NATIONAL STEEL PRODUCTS CO.

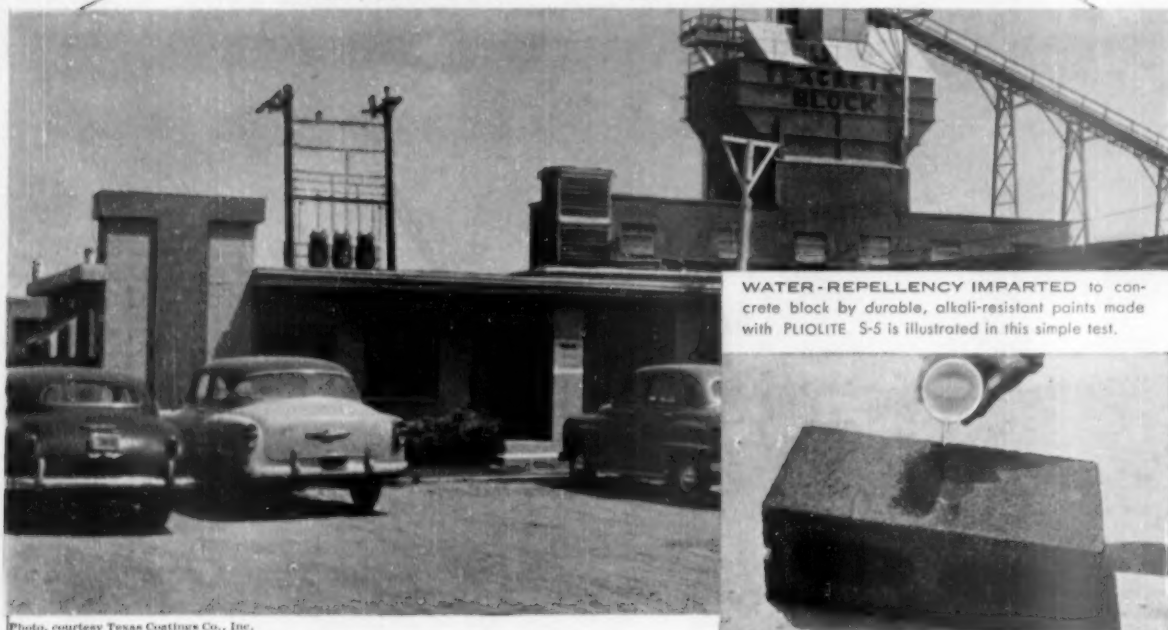
Houston, Texas. Warehouse and distribution facilities for steel products in the Southwest.



Plan for tomorrow—buy U.S. Savings Bonds today!

# The Paint that put the "block" in Concrete Block

WHAT BETTER APPROVAL of masonry finishes based on PLIOLITE S-5 than this plant of Texas Industries, Inc., a leading concrete block producer, colorfully protected by Ideal Chemical Products, Inc. masonry paint.



Photo, courtesy Texas Coatings Co., Inc.

HOW TO MAKE porous, lightweight, concrete blocks repel water, yet retain their pleasing texture was a long-standing problem to manufacturers. Sand and cement water paints stopped the water but were limited in color, destroyed the texture of the block, faded in sunlight and were difficult to recoat. Top coats of conventional oil paints failed prematurely from alkali attack.

Ideal answer to the problem finally came in paints based on PLIOLITE S-5. This synthetic

rubber resin—especially made for masonry finishes—fully resists water, weather and chemicals. Paints made with it apply quickly—dry even faster—shrub off water like a duck's back to give colorful, lasting beauty and protection to any masonry surface. For full details on manufacture or supply of paints containing PLIOLITE S-5, write:

Goodyear, Chemical Division  
Dept. N-9415, Akron 16, Ohio

CHEMICAL  
**GOOD YEAR**  
DIVISION

Chemigum, Pliobond, Pliolite, Plio-Tuf, Pliovic  
—T. M.'s The Goodyear Tire & Rubber Company, Akron, Ohio

Use-Proved Products—CHEMIGUM • PLIOBOND • PLIOLITE • PLIO-TUF • PLIOVIC • WING-CHEMICALS—The Finest Chemicals for Industry

"... when Congress cheerfully O.K.'d almost any money request for almost any missile project..."

MISSILES starts on p. 78

can't afford to short-change any of our present fighting equipment. Our main reliance is still on stepping up the speed and effectiveness of piloted bombers and fighters, faster and heavier ships and subs, lighter and more powerful weapons for the foot soldier.

Guided missiles will play a part in most kinds of combat—but only a part.

## II. Scramble at the Pentagon

There's little doubt that the super-missile will eventually be the key to both offense and defense. If you don't have as good as or better than your enemy, you're a dead duck.

That's why the Pentagon is investing literally billions in guided missiles. A good guess might be that the whole missile program—research and development and procurement—is running at about \$1.5-billion per year now.

• **Contestants**—The Army, Air Force, and Navy are in hot competition for this new missile money. Service chiefs know that the one who gets out in front with a missile is almost sure to be top dog at the Pentagon.

Each has a perfectly logical line of reasoning to support his contention that missiles properly belong to him. Air Force calls them "pilotless bombers"—a logical extension of air power. Army notes that the ground-to-ground missile is really a new kind of artillery. Navy proclaims that missiles fit precisely into its carrier and sub warfare.

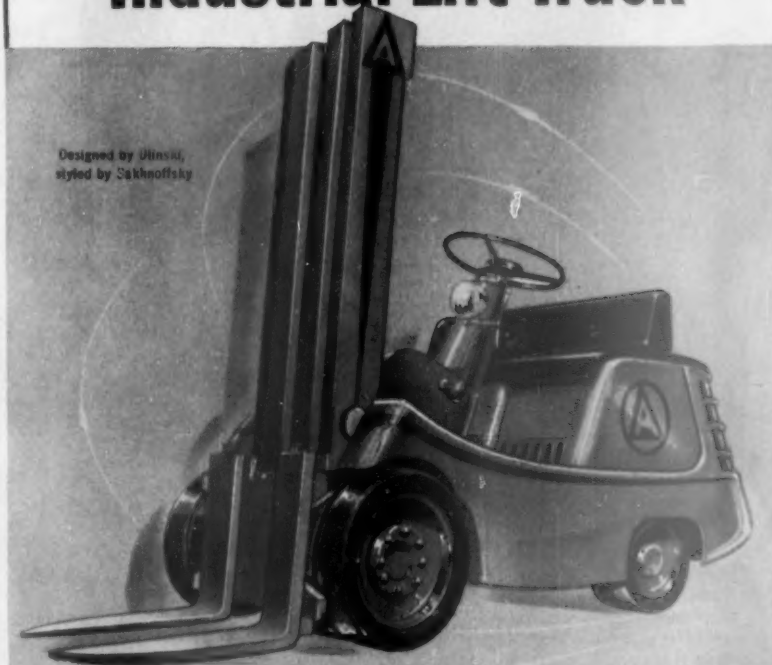
As of now, the Air Force is out in front. It's getting about \$1.25-billion of the \$3-billion voted for missile work so far. The Air Force has missiles under way in all categories, and one of each type in production. Army comes next with about \$1-billion, Navy third with about \$750-million.

But as far as "the state of the art" is concerned—and with it the potential to win—all three services are about neck-and-neck.

• **Czar**—Interservice competition ran wild right after World War II, when Congress cheerfully O.K.'d almost any money request for almost any missile project. A budget crackdown made things tougher for the services in 1948 and 1949. Then the war broke out in Korea, and a big military buildup began.

In 1951, defense chiefs brought in K. T. Keller, president of Chrysler Corp., to take full charge of the entire

## An Entirely NEW Industrial Lift Truck



## THE NEW Automatic DYNAMOTIVE

Modern styling gives it the "new look"...advanced engineering gives it the new performance! It's the sensational Automatic DYNAMOTIVE, America's first gas truck with electric transmission. DYNAMOTIVE utilizes entirely new engineering design that permits the performance advantages of both gas and electric trucks... plus infinite step transmission that gives the smoothest, most fully controlled flow of power available!

### HERE'S WHAT AUTOMATIC'S ELECTRIC TRANSMISSION MEANS TO YOU

No clutch! No gears to shift! No hydraulic torque converter or over-drive mechanism! Dynamotive does for users of materials handling equipment what modern diesel-electric power has done for American Rail-

roads. Its advanced, new design insures a whole new concept of operation...with maximum economy, maximum efficiency!

DYNAMOTIVE handles like a fine automobile, provides its operator with unsurpassed convenience and safety. Its handy accessibility permits "split-second" servicing. And it also offers all of the industry-proved features that have made other Automatic industrial trucks America's "blue ribbon" line!

DYNAMOTIVE has performed sensationally in laboratory tests, and in actual on-the-job applications! You'll want to investigate its advantages... in terms of what they mean to your business in lower costs and smooth, efficient operations. Mail coupon today for complete information.

# Automatic

WORLD'S LARGEST EXCLUSIVE BUILDER OF ELECTRIC-DRIVEN INDUSTRIAL TRUCKS

**Automatic** 93 West 87th St., Dept. B-4  
Chicago 20, Illinois

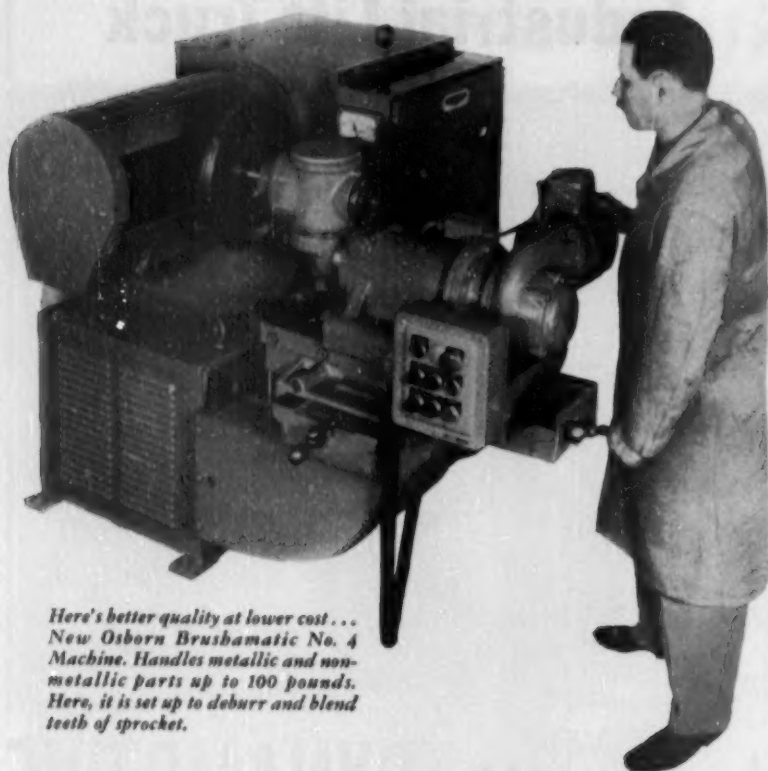
Without obligation, please send me complete information on the new Automatic DYNAMOTIVE.

Company Name.....

By.....Title.....

City.....Zone.....State.....





Here's better quality at lower cost...  
New Osborn Brushmatic No. 4  
Machine. Handles metallic and non-  
metallic parts up to 100 pounds.  
Here, it is set up to deburr and blend  
teeth of sprocket.

## Choose your weapons!

**H**OW are you going to answer the challenge of competition when it comes to your deburring and finishing operations? By hand? Or, by machine... with the Osborn Brushmatic? You'll far outclass the old manual deburring department in *quality* of work and in *economy* when you convert to Osborn's automatic power brushing.

At the push of a button, Brushmatic machines remove burrs and feather edges, blend surface junctures and clean parts thoroughly. Results are absolutely uniform... piece after piece. Scrap loss is nil. Service life of part is increased through elimination of stress-concentrating scratches. And it turns out work about 5 times as fast as hand methods.

Find out how you can apply this modern method to your production. Call your nearby Osborn Brushing Analyst or write *The Osborn Manufacturing Company, Dept. A-31, 5401 Hamilton Avenue, Cleveland 14, Ohio.*

**INFORMATION:** Write today for your copies of booklets on Automatic Deburring and on Brushmatic Machines.



# Osborn Brushmatic

BETTER QUALITY... LOWER COSTS... AT THE PUSH OF A BUTTON

"... so delicate that most of them still have to be built largely by hand..."

MISSILES starts on p. 78

missile program. He had full authority to reject projects that didn't look promising, to step up ones that did, to decide which service and which company would do each piece of work. As could hardly have been avoided on a job like that, Keller hurt many feelings, trod on many toes. He drew down on himself a storm of criticism from all quarters. But it's generally acknowledged, in retrospect, that he handled his task well.

During the Defense Dept. reorganization last fall, Keller's Office of Guided Missiles was abolished. Now, other offices of the Defense Dept. keep watch on the missile program, alongside what is perhaps the sharpest-eyed watchdog of all—Congress.

• **Results, Please**—You can hardly overestimate the power of a congressional committee. This year, as in past years, the services have done everything in their power to show Congress what the taxpayers are getting for their missile money. As budget time rolls around, the services begin putting out movies, newspaper pictures, and the like to prove to Congress and citizens that the Air Force—or Army—or Navy—is returning good value for money spent.

### III. Scramble in Industry

The companies that build the missiles are having troubles of their own. Missiles today, like fine watches, are so delicate that most of them have to be built largely by hand. "They have to be built by scientists," one West Coast executive says. Companies wonder how they'll be able to turn them over to even highly skilled workers when the time comes to put birds into mass production.

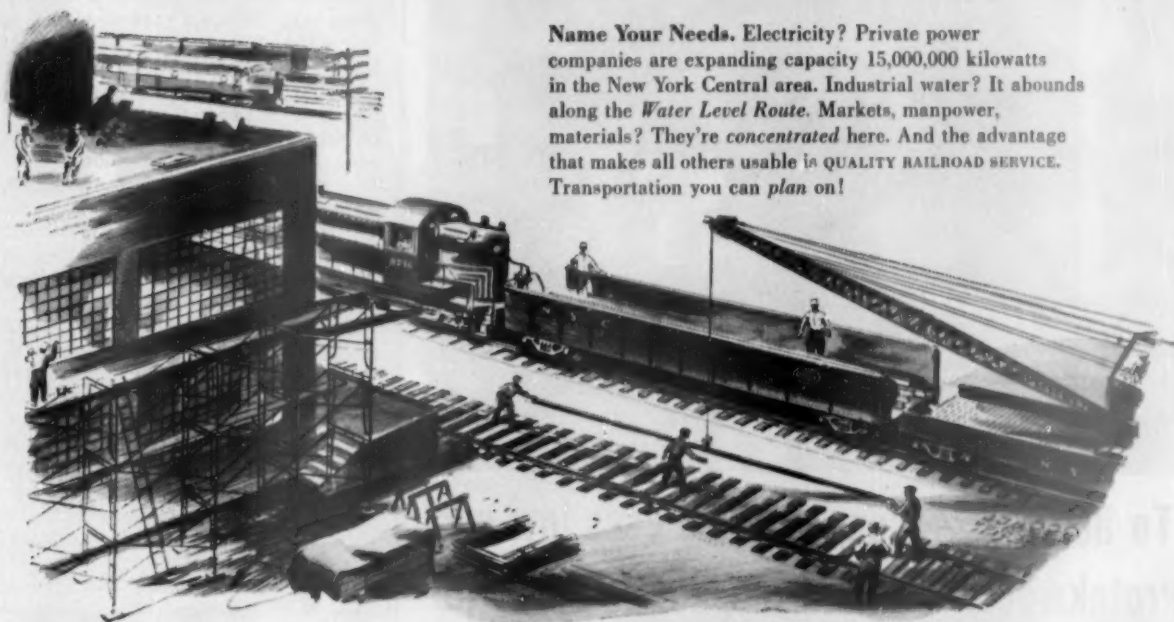
Still, missile work is going ahead. The present missile program is big enough to provide business for almost every airframe and engine maker of any size. There are literally dozens of missiles in various stages of development.

And while there's nothing that resembles production in the Detroit sense, or even in the aircraft sense, there has been a marked swing toward getting ready for production.

• **Names**—Almost every big name in aircraft has some stake in the missile program. In the East, you hear names like Martin, Fairchild, Bell Aircraft, Reaction Motors. In the West, you get Lockheed, Rheem, Northrop, Douglas. There's plenty of work for everyone,

# Quality Railroad Service

*makes Good Plant Sites a SIGHT BETTER!*



**Name Your Needs.** Electricity? Private power companies are expanding capacity 15,000,000 kilowatts in the New York Central area. Industrial water? It abounds along the *Water Level Route*. Markets, manpower, materials? They're *concentrated* here. And the advantage that makes all others usable is **QUALITY RAILROAD SERVICE**. Transportation you can *plan* on!



**Power to Deal with Distance.** A vast and growing diesel-electric fleet, plus more than 1,900,000 steam horsepower, pull for you on New York Central. Assurance your plant will be served with year-round, all-weather certainty that no highway or waterway can match.



**Switching Done "On the Button!"** At more and more of New York Central's key yards and junctions, you'll find fast, mistake-proof, "push-button switching." Another feature of **QUALITY RAILROAD SERVICE** that speeds and safeguards shipments to or from your plant.

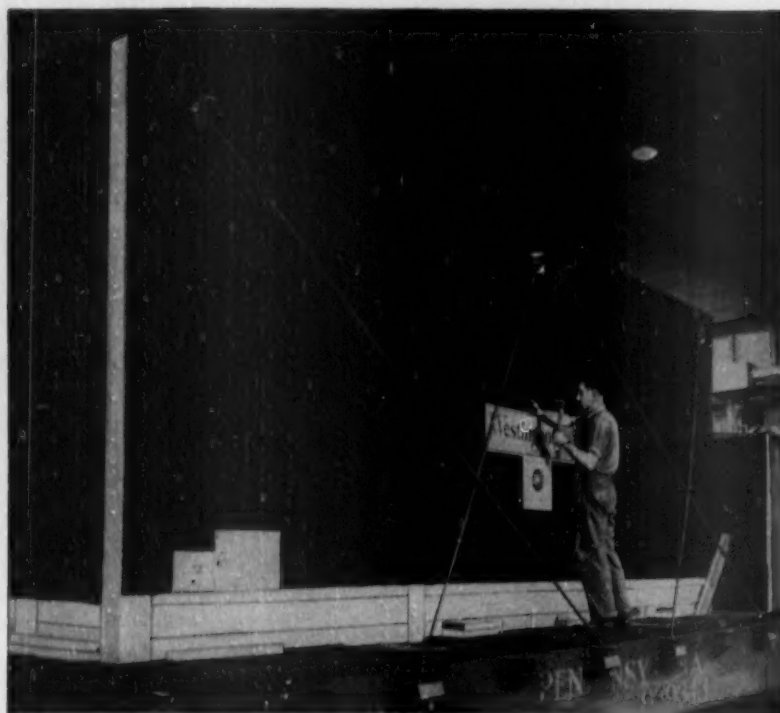


**They Keep "The Cat in the Bag!"** Call on New York Central's experts for aid in industrial home hunting. They *know* this area . . . and they know how to keep your identity secret. Their 100% confidential help, too, is part of **QUALITY RAILROAD SERVICE**.

## New York Central

N. Y. C. Means Q. R. S.





## "To be sure"—Westinghouse uses low-cost Protekwood to guard shipments en route

**Protekwood® simplifies exposed shipment problem. Eliminates expensive protective packaging.**

Whether you ship turbo jet motors or bulky agricultural machinery, Protekwood will guard your product from weather damage while en route—at a saving!

Manufacturers of many types of products are finding increasing uses for this unique packaging material. Protekwood helps seal out rot, fungus and moisture.

**PROTECTS EXPORT SHIPMENTS.** Most export shipments require moisture barrier packaging. Conformance is easy and inexpensive with Protekwood because it is moisture resistant. Protekwood is rugged too! It will hold its own in a cargo sling or in a pitching ship's hold.

**PROTECTS OPEN CAR SHIPMENTS.** As the above picture illustrates, Protekwood is

made to order for open car shipments. It's easy to fabricate and can be contour formed. It provides a wall of protection around your product during shipment.

**WHAT IS PROTEKWOOD?** It's a water-repellent asphalt wood laminate which is made by cross laminating both sides of a hardwood core with asphalt-saturated Kraft stock. It can be sawed, stapled, nailed or glued. Protekwood's smooth surface both sides makes it easy to paint or stencil.

**SPECIFICATIONS:** 1/7" thick. Standard panel size 48" x 96". (Qualifies as substitute for container grade plywood in Government specifications.) Tekwood®, the container material of a 1001 uses, is also available at a saving.

**HAVE A SHIPPING PROBLEM?** The Protekwood division of the United States Plywood Corporation is ready to assist you.



**Protekwood®**

A PRODUCT OF  
**UNITED STATES  
PLYWOOD CORPORATION**

**United States Plywood Corporation**  
55 West 44th Street, New York 36, N. Y.

**FREE SAMPLE**

8W-2-27-54

Please send me free sample of Protekwood and descriptive literature. ( )

Please have a salesman call with full details. ( )

NAME.....

ADDRESS.....

CITY.....STATE.....

**"...figuring out solutions to problems that might never occur to scientists..."**

**MISSILES** starts on p. 78

and more. New companies are entering the field continuously.

Exactly what kind of work is industry doing now? Here's a random glance:

- Douglas Aircraft Co.'s Santa Monica (Calif.) plant is in production with the Nike, a ground-to-air missile for use against enemy aircraft. Batteries of Nikes are being spotted around several major U.S. cities—among them New York, Washington, Los Angeles, Boston, and Detroit.

- Fairchild Engine & Aircraft Corp. (Hagerstown, Md.) is working on a baby turbojet engine for guided missiles (BW—Dec. 5 '53, p. 49). The engine's peculiar charm is that it's cheap; since guided missiles are built to be destroyed, they become more appealing to the Pentagon as they become less expensive.

- Northrop Aircraft, Inc. (Hawthorne, Calif.) is in limited production of the XB-62 Snark, a long-range intercontinental missile. Security rules shroud the Snark's performance, but there have been some enthusiastic off-hand reports on it.

- Reaction Motors, Inc. (Rockaway, N. J.) has been concentrating on high-powered rocket engines for intercontinental missiles of the German V-2 type. Main problem, insiders say, is to find a powerful fuel that will burn slowly enough to keep the missile in the air for a useful length of time. Reaction has done a lot of work on fuel development, and is reportedly nearing its goal.

- Ryan Aeronautical Co. (San Diego, Calif.) announced in January that it's in volume production of rocket engines for a surface-to-surface missile.

You can get an idea of the importance of missile development in these companies' thinking if you look at the way they handle their programs. Lockheed Aircraft Corp., for instance—which wouldn't touch missiles three years ago—now has an entire division devoted to them. Rheem Mfg. Co. set up an aircraft division right after the outbreak of war in Korea, and now the division devotes more than one-third of its floor space to missile work.

- **The Future**—Few of these companies feel it's time to go into full production of missiles yet. Many, though, are in favor of starting pilot production on each missile as soon as possible—even though the missile is not yet perfect. This way, production engineers get a close look at the missile; they can start figuring out solutions to problems that might never occur to the scientists.



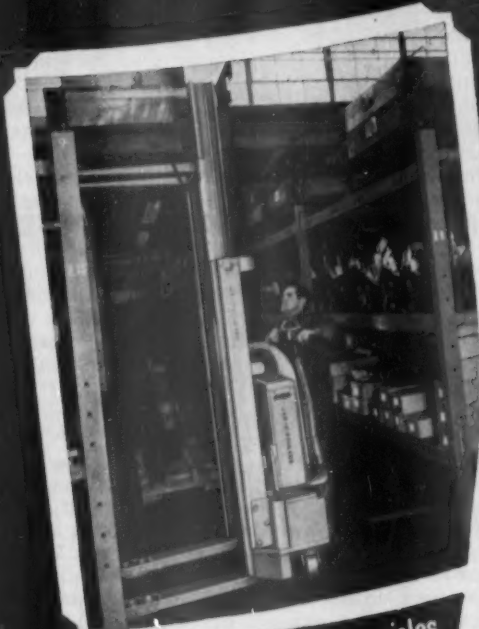
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Food Processor ....	50 L-S in use—reordered	12

\*Names on request

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# PRODUCTION

## Color TV Must Make Up Its Mind

● 1954 is the year in which set makers must pick out a tube, decide what the public will want.

● There will be little production and fewer sales, while the trade seeks to gauge the customer's mind.

● In 1955 and 1956 the sales floodgates will open. And woe betide the company that bets on the wrong horse.

"Everyone has something in the backroom." That's how a top producer of television sets sums up today's struggle to get into the market with a color receiver.

It's a tempting market. The industry generally expects that there will be about 1-million color sets in American homes by the end of 1955. One year later, the total may reach 2.6-million. But the No. 1 question—who will sell the sets—depends on how well each manufacturer gauges the market, and on how much color production each can achieve this year.

• **Guessing**—Each manufacturer must make his own decision on how to approach the market; a wrong guess could mean losing out in the scramble. The decision shapes up as being just as difficult as the black-and-white production problem seven or eight years ago. And it may be riskier.

As of now, the situation looks this way: There are some two dozen makers of TV sets, with a wide range in size. At one end are the big, integrated outfits, such as Radio Corp. of America, which make most of their own components and rely on licenses for the rest. At the other extreme are the small companies that buy most of their parts from the larger outfits and then produce sets under their own names.

For both types, color is a problem, and the heart of color is the tube. The big company, which produces tubes as well as sets, must turn out the tube that the rest of the industry wants, as well as the set that the public desires. For the small company the problem is similar; it must decide what tube to buy, and then build production around it.

• **Three Tubes**—Up to now, three color picture tubes have appeared. One belongs to RCA, one to Columbia Broadcasting System's Hytron division in Danvers, Mass., and the third to Chromatic Television Laboratories, Inc., an affiliate of Paramount Pictures, Inc.

Each of these tubes has some features that the industry likes—and others that are already snagging production. The trick for a set maker is to pick the right one.

This explains the industry's intense interest in what goes into each tube, and how each works when you put a picture on it.

• **Three-Gun**—The RCA and CBS tubes have some points in common, though each company points to features that the other cannot match. Both are three-gun affairs. That is, a signal entering the set carries three pulses, one of which goes into each of the guns. When the first gun fires, it lights up red dots on the tube face, the second lights up blue, the third green. A grid between the guns and the tube face blocks out any shots that are off the mark, admitting only those that will hit dots of the right color. The dots on the tube face—there are some 750,000 of them—are tiny pieces of phosphor. These glow when electrons hit them, thus creating the color image on the tube.

The difference between the RCA and CBS tubes lie in the construction of the grid and the tube face. RCA puts its grid slightly behind the face; both grid and tube face are flat surfaces. CBS puts its grid right on the tube face, and curves both, just as the old black-and-white face is curved. CBS claims that this permits producing a slightly larger picture on a tube that costs less to produce. Both tubes are expensive by the black-and-white standard of about \$20 per tube. The RCA type costs the set maker \$175, while the CBS tube sells for \$125.

• **Cheaper to Make**—That cost is precisely the point where the Chromatic tube, the third type, enters the picture. The maker says it can be sold for less than either of the others because it is cheaper to produce, though it hasn't told yet how much cheaper it will be.

The Chromatic tube uses only one gun, through which all colors are fed. Instead of a grid, the tube has an electronic screen that bends the electron beam inside the tube, making each color fall in the proper place on the tube's phosphor face.

Besides the cost of the tube, the set maker must also worry about its availability. That's where RCA and CBS can claim strength. They will produce the tubes for most of the 100,000 to 200,000 sets that will be turned out this year, CBS says flatly it will be the top 1954 producer. Its Newburyport (Mass.) plant is already in pilot production, and a second plant at Kalamazoo, Mich., will start up in May. By June, CBS says, it will be turning out 10,000 color tubes a month.

Chromatic, for its part, has only two producers under license now: Crosley division of Avco Mfg. Corp., in Cincinnati, and Thomas Electronics, Inc., at Passaic, N. J. Other companies are experimenting with the tube, which was developed by Dr. Ernest O. Lawrence of the University of California. Still, there are no signs yet that Chromatic will be able to give its big rivals much of a run, at least for the next few months.

• **Final Answer?**—A chief engineer for a top set maker reports that his company has tested the Chromatic tube for many hours, and that there are still kinks to be ironed out before it could be put into production. One difficulty is radiation. Unless special precautions are taken, the signals interfere with some broadcasting bands, which would mean trouble with the Federal Communications Commission. Picture quality is another difficulty found by this engineer, whose company is already in production with one of the other tubes. Still, he adds that he can find nothing inherently wrong with the Chromatic tube, and thinks that it might be the answer to TV color.

• **Clamming Up**—Not many manufacturers will go that far, for any of the tubes. Most of them won't even say which tube they have picked. The one thing that just about all of them will admit is that the 15-in. tube, which was the first to appear, is already obsolete.

Admiral Corp., which says that it will turn out 30,000 color sets this year (BW-Jan. 16 '54, p100), claims the 15-in. tube cannot be sold. Du Mont announces that its first color tube will be 19 in. General Electric—which recently

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created the job of sales manager for color receivers—isn't talking, except to say that it is now producing a three-gun tube, and expects to have a color set out soon. Sylvania and Philco are silent too, though Don Mitchell, chairman of Sylvania, says that next year's 19-in. tube will cost less than this year's 15-in. job. Sylvania is rumored to be producing an RCA-type tube.

All told, 1954 looks like a year of probing and sampling, with little real selling in the field of color. Even if the industry pushes output beyond the 200,000-set mark, it is unlikely that any of those sets will get into the home—unless it is the home of a television executive who wants to see how his answers to the color question are standing up. Instead, the industry expects that most of the sets will stay in the stores. The prices will stay high—around \$1,000; the tubes won't get much bigger than 15 in. In some cases, you won't be able to buy a set even if you want to. The dealer will be reluctant to part with his floor model unless he knows where he can get another one. About all you will get is a receipt for your order.

• **Year of Testing**—The companies will use 1954 to feel out public reaction. If it seems to favor the color quality of the set with a picture tube from Company A, then Company A will get the next batch of orders. If it goes for the low price tag on the set with the tube from Company B, then orders are likely to go to Company B.



## But Nothing Comes Out

The complicated machine above does nothing. It is an assembly of all kinds of gears that go round with no purpose but to amuse Lawrence A. Wahlstrom, a Los Angeles engineer. He put it together as a hobby, "an impractical outlet for ingenuity."

Nobody knows better than the industry itself that the engineers who have been struggling for years to develop color TV are the poorest judges in the world of their own creation. As one engineer puts it, "Just because we think one set looks better than another is no reason for stepping up production on that set. We've been wrong too many times. You've got to get the sets out in the stores and see what people say about them before you can decide on your production planning."

One thing the engineers are expected to do is chase the bugs out of color set production. This is a problem that may be solved by the tube manufacturers, that is the source of the most troublesome problems. If a manufacturer is able to produce a tube that can be put inside a receiver without requiring a whole new set of complex circuits, he stands a good chance of running away with the market. Set manufacturers will take to his tube—assuming he is able to maintain good picture quality—because they will be able to mass produce the sets that use it.

As it stands now, mass production is no easy job. And it becomes even more difficult as tube sizes increase.

• **Production**—The tube manufacturers themselves are running into a lot of new problems.

They claim that they are ironing out the big ones, but these apply only to the sizes that have been produced thus far. When people start demanding a 21-in. tube—the size they have become accustomed to with black-and-white—there is certain to be a problem in producing it. Experts who are willing to talk about this say that somebody will have to come up with a radical new way of getting color onto the tube face. Unlike black-and-white, you cannot blow up the tube face size without affecting the other dimensions of the tube.

To get a 21-in. tube, you would probably have to use a tube that is 3 ft. to 4 ft. long. That would cram the living room. Nobody has hinted that this problem has been licked, though RCA did say last week that it would go into production next year with a 21-in. tube.

New quality control problems also arise in color production—both in the tube-making stage and in set manufacturing. Where black-and-white requires about one inspector for every five workers the ratio might be one to three in color, because of the closer tolerances.

About the only people who can smile at color and look forward to it without fear are the glass manufacturers. They can turn out tubes of any shape, any size. What goes inside is no concern of theirs.



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## PRODUCTION BRIEFS

Fast, automatic tanning of leather has been achieved by Secotan Inc., Somerville, Mass., an affiliate of American Research & Development Corp. The machinery, which occupies a space 12 ft. by 25 ft., handles up to 1,000 hides per day, needs only three or four men to run it. Secotan says the finished product is softer and stronger; last week, its first machine was shipped to Eagle Ottawa Leather Co., Grand Haven, Mich.

**Radioisotopes and Small Business** is the title of a booklet prepared by the Atomic Energy Commission for small firms interested in using radioactive byproducts. It describes such applications for radioisotopes (BW—Jul. 25 '53, p68) as thickness gauges and flaw detectors, and explains the cost of installing them. The Small Business Administration, Lafayette Bldg., Washington, D. C., is distributing the booklet: Ask for Bulletin No. 31.

More engineering graduates are in the offing for industry: Dr. L. W. Houston, president of Rensselaer Polytechnic Institute, Troy, N. Y., says that the enrollment in engineering colleges will more than double in the next 15 years, reaching a peak of 30,000 students annually. Right now, colleges are running along at about half that (BW—May 2 '53, p60).

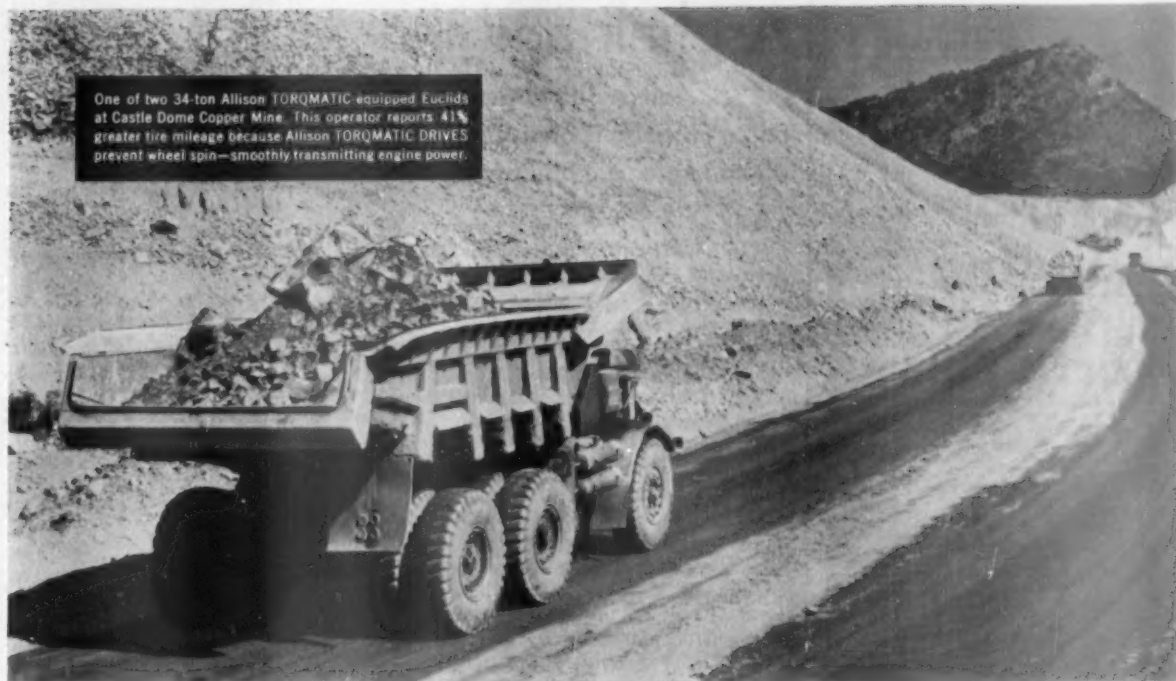
**In-flight radar** will soon get a tryout on Pan American-Grace Airways' new DC-6B's, slated for service between Miami and Buenos Aires. It helps the pilots to avoid dirty weather, by spotting storms and heavy clouds. After the tryouts, Panagra will decide whether to put the electronic aid on its other smaller airplanes.

**Pike's Peak** (Manitou Spring, Colo.) is the site of a new engineering testing station being opened by General Motors in April. The grade and altitude conditions of the 14,110-ft. peak are natural for checking the engines, transmissions, and carburetors that go into GM's cars and trucks.

**Petroleum notes:** Standard Oil Co.'s Lima (Ohio) refinery will use specially constructed caverns in which to store LP gas near its plant. From the hub of a shaft, 455 ft. below the surface, six spoke-like caverns are being blasted out of solid rock. . . . Microorganisms help spot oil formations in a method of Dr. R. J. Syrawinski, Louisiana State University. Soil samples that contain the organisms are exposed to hydrocarbon gas. If they consume the gas at a fast rate, it's a sign that oil is present.



One of two 34-ton Allison TORQMATIC-equipped Euclids at Castle Dome Copper Mine. This operator reports 41% greater tire mileage because Allison TORQMATIC DRIVES prevent wheel spin—smoothly transmitting engine power.



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Castle Dome Copper Company reports it gets 17,000 miles per tire on off-highway trucks equipped with Allison TORQMATIC DRIVES compared to 12,000 miles per tire on mechanical-drive units. But increased tire life is only part of the story—the firm also reports the TORQMATIC-equipped "Eucs" have better availability and production records.

This operator runs a fleet of 12 trucks—2 TORQMATIC-equipped "Eucs" and 10 mechanical-drive units—hauling 390,000 tons of ore and overburden per month up 8% grades on mile-long runs. The "Eucs" average 25.3 trips per 8-hour shift, each hauling about 58,000 tons per month.

TORQMATIC DRIVES smoothly transmit engine power—help prevent wheel spin that can quickly strip the tread from a tire. There's no clutch pedal to push and only three forward gearshifts—instead of the usual 7 or 10—handle all loads and grades. The matched converter-transmission team balances engine power and load demand, absorbs harmful drive-line

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## Asphalt and the Jet Air Base

House subcommittee hears the industry assail Air Force limitations on its use. The Pentagon says it much prefers all-concrete pavements.

A House Armed Services subcommittee this week was scratching its head over some \$700-million in Air Force authorizations. One major question before the group: Had the Pentagon gone too far in stacking the cards against the use of asphalt in jet air bases? Five new bases are on the 1955 program, and eight old ones are due for renovation.

Last week the subcommittee spent four days listening to all sides of the asphalt dispute. At issue was an Air Force ruling that asphaltic concrete could be used for only a limited portion of any given air base, and then can be used only (1) in combination with portland cement concrete, and (2) if the bid is at least 5% lower than one for portland cement alone. In general, the three-sided argument shaped up this way.

The Air Force said that it just plain preferred cement and wouldn't let asphalt in at all were it not for the cost factor. But, dollars being dollars, it is willing to use asphalt in noncritical areas of a base, notably in the middle reaches of the runways, and on the taxiways.

The asphalt people argued that their product, suitably put down, is plenty good enough to use anywhere. And, added Bernard Gray, president of the Asphalt Institute, if his product is suitable for any part of a base, it should not have a cost differential tied around its neck.

The portland cement people largely contented themselves with saluting the manifold charms of their own product. They threw no rocks at the neighbors' children. And the neighbors were just as polite on the topic of portland cement.

The Air Force, whose principal spokesman at the hearings was Maj. Gen. R. M. Ramey, director of operations, stressed the prospect of full jet operation in explaining its recent tightening of the restrictions on asphalt.

• **Fuel Damage**—Jet experience, Ramey told the subcommittee, was dotted with stories of asphaltic pavements disintegrated by spilled fuel, of jet engines ruined by sucking up loose stones, and by accidents caused by runway ruts. Out of this has come a strong preference for portland cement among air base commanders and constructors. The preference does not seem to be weakened

by the fact that thousands of yards of asphalt pavement are giving adequate service for jets.

The increasing use of jets, the Air Force spokesmen reiterated, makes it essential to use the most stringent criteria. For a starter, it was decided to bar asphaltic surfaces from such critical areas as aprons, hardstands, washracks, calibration platforms, and the 1,000 ft. at each end of a runway. For the remaining areas, asphalt would be given a look-in because of its relative cheapness.

• **Differential**—As the hearings developed, the asphalt industry took its heaviest swings at the cost differentials that were imposed. Under Air Force procedure, these work out this way:


First, the contracting officer on a new project makes two cost estimates, one for all-concrete pavement, and one for a combination using asphaltic pavement for the noncritical areas. If the combination estimate is more than 15% lower than the all-concrete figure, he then prepares plans and specifications and calls for bids, solely on the combination basis.

In the much more likely event that the cost spread is less than 15%, the contracting officer calls for bids on both all-concrete and combination plans. At this point, the all-concrete gets its differential. A combination bid can win only if it is 5% lower than an all-concrete bid.

• **Multiplying**—The Asphalt Institute points out that this is tougher than it sounds. The asphaltic part of the pavement may be as little as one-fourth of the whole. Assuming concrete costs in the two bids to be the same, the whole burden of making up the 5% differential would fall on the asphalt. Thus, for the limited noncritical area, the asphalt bid in practice would have to be 20% lower than the comparable concrete.

This factor is made sharper by the fact that drainage and other nonpaving items are often lumped in a single bid figure.

Speaking for the institute, president Gray argued that the fact that so much asphaltic pavement was working satisfactorily entitled the material to equal consideration. His further claim that none of the damage laid to asphalt occurred when the material was laid sufficiently densely received some backing from the Army Corps of Engineers.



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# Preparing for War—in Peace

American Machine & Foundry thinks it has found out how to do it. Mobilization planning is now a part of everyday routine at AMF plants.

American Machine & Foundry Co. of New York (BW-Mar. 1 '52, p60) foresees a day when production at its 17 plants may have to switch suddenly to war goods. A lot will depend on how fast and how painlessly AMF can swing from diverse civilian products to a corresponding variety of munitions. So AMF has worked out a day-in, day-out mobilization meshed with its peacetime operations.

AMF is putting into effect what is very likely the most comprehensive plan ever adopted by a company of its size—more than 10,000 employees, more than \$130-million annual sales. The planning was worked out by Maj. Gen. R. L. Maxwell, vice-president in charge of personnel, and a staff of experts. It aims at accounting for every last-minute detail that could come up on M-Day.

• **Three Stages**—In turning theory of mobilization planning into an everyday company operation, AMF has gone through three major steps:

• A study of the plants from A to Z—their production machinery, power and materials sources, present civilian and military output, adaptability for conversion.

• Analysis of how a changeover can best be accomplished—in detail.

• Schooling of management, from the top down through the branch-plant brass, in how to operate peacetime business and war mobilization side by side. AMF is well advanced in this stage.

• **Three Assumptions**—AMF has tried to deal with the three big bugaboos of any industrial mobilization scheme: (1) Will there be a definite M-Day or a dragged-out buildup as we had from 1939 on? (2) How can you make sure that tools will be available for your planned capacity? (3) How can you get the labor supply that you need in the pinch?

AMF is confident on the first two points. Its changeover is geared to varying shades of mobilization, and its estimate of peak production capacity is based almost entirely on present equipment. As for labor, AMF is counting on being able to multiply its man-hours several times—on faith that the labor will be available when it is needed.

The company intends to make the general lines of its plan known to other manufacturers who have a legitimate interest in the problem.

• **One Case**—Here's how AMF's plan would work in the case of Cleveland

Welding Co., one of the company's biggest subsidiaries.

Before M-Day, around 80% of its production would be in bicycles, rims for truck and tractor wheels, other circular welded products; around 14% in military odds and ends; and 6% in token orders for military items that would become major contracts on M-Day.

Assuming that the token orders (called Tentative Schedules of Production) blossom into full-scale orders, on M-Day the subsidiary's output would swing to 75% munitions, 25% bikes and rims.

AMF knows now just how it would make this switch. The present machinery is a natural for making mortar shells, especially the 81 mm. type. This isn't a guess; it has been checked by measuring output in small "pilot" orders.

AMF figures it can boost capacity by 50% on M-Day by adding machinists to its work force and by crowding more lathes, drills, and presses onto the floor. About 80% of present equipment can easily be shifted to military production; final assembly can reach an optimum rate if about 60% of the components manufacture is farmed out to small local shops, which are already lined up.

• **Converting from Toys**—Plant layout for some civilian products may not be best for war goods. That's true at Junior Toy Corp., a subsidiary at Hammond, Ind., that makes velocipedes. Efficiency would suffer, plant management feels, if production was shifted to ammunition parts, medical equipment, and DDT containers without modifying the machinery for a better layout.

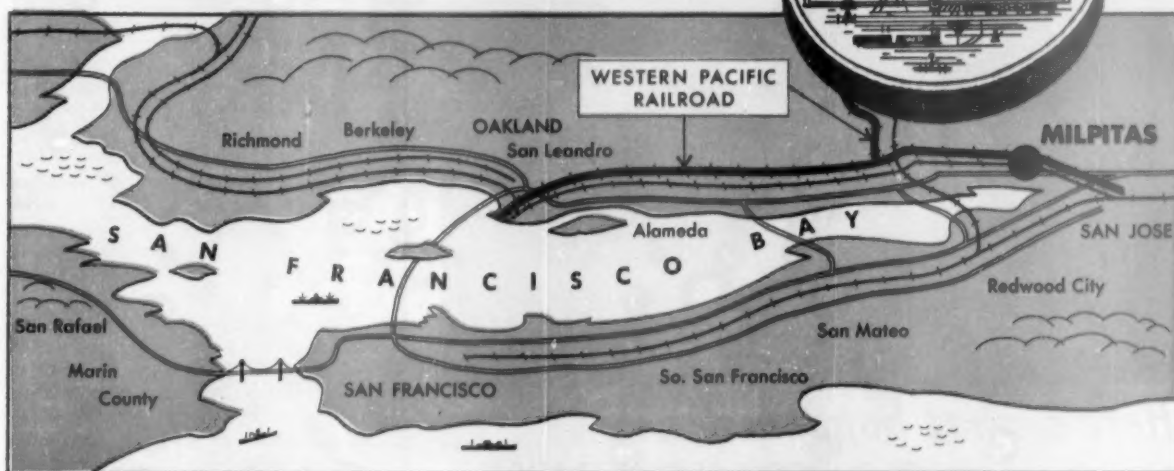
With the help of the Purdue University department of industrial management, plant officials have mapped out a new floor plan. Most of the movable machinery can be regrouped in smaller, specialized production units adapted to the peculiarities of specified defense items. The M-Day arrangement has been figured out on a model that's set up for future reference.

• **Swatting the Bugs**—Bottlenecks in design, machinery, and materials supply are the hardest to plan against, AMF found as it went along. Maxwell's staff compiled a long list of gripes dating from the last war, then worked out solutions for those bottlenecks, at least.

Plant engineers were pleased to

# Looking for the ideal plant site in Northern California? Look at California's newest city!

The new \$45,000,000 assembly plant being built by Ford Motor Company in Milpitas (Incorporated Jan. 26, 1954) will be big (160 acres!), but Western Pacific still has 1200 acres available in the same industrial tract, a carefully planned new development strategically located at the tip of San Francisco Bay.



Centrally located for economical distribution, the Milpitas area (6 miles north of San Jose) is only 42 miles from San Francisco and 37 miles from Oakland and midway between Los Angeles and the Northwest. This new industrial area is in the heart of one of the country's fastest-growing, most prosperous areas.



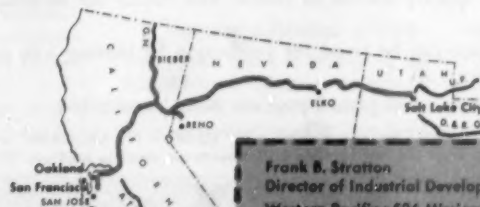
Best possible transportation facilities are provided by Western Pacific Railroad with a spacious new switching yard serving the development area; by express highways to San Francisco, Oakland, Los Angeles, the Pacific Northwest and East; and by the great seaports of San Francisco and Oakland.



Plenty of power, gas and water are immediately available to new industries. In fact, Milpitas is the terminus of the "super-line" bringing natural gas from Texas and is directly on the 72-inch water main of the Hetch Hetchy system serving San Francisco. Milpitas is also near large residential developments.

## WESTERN PACIFIC

ROUTE OF THE VISTA-DOME  
CALIFORNIA ZEPHYR

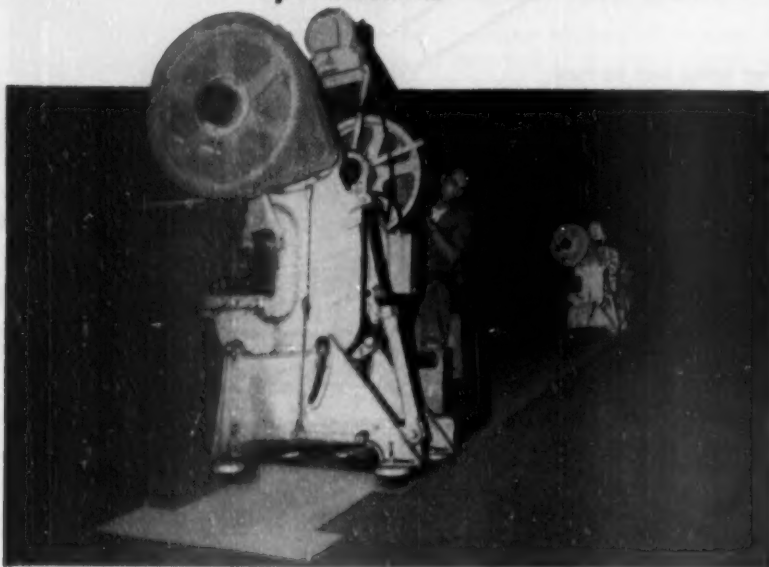


FOR  
MORE  
FACTS

Frank B. Stratton  
Director of Industrial Development  
Western Pacific • 526 Mission St., San Francisco  
Please send me additional information about the  
Milpitas industrial area.

Name \_\_\_\_\_  
Name of Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

# Production line is **MOVED** 200 feet *and put in* 23 minutes *operation in*



## Here's what happened...

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A production line of eight punch presses was moved to another location in a plant. The machines were set down, leveled, connected to air and electrical lines, and tools and dies inserted. All eight machines were producing parts in an elapsed time of 23 minutes. The new Leveling Barrymounts made this possible, because Barrymounted machines do not have to be shimmed and lagged to the floor. *The machines mounted on them will not walk.*

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- Machines can be quickly moved to central tool rooms for re-tooling or repair.
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"... it's unwise to set up hard-and-fast rules at the top..."

MOBILIZATION starts on p. 100

contribute to the list. Complaints at the Brooklyn plant, for example, fell into two categories:

- Designs for military items in the last war often lacked complete engineering information.

- It was hard for company engineers to persuade procurement people to O.K. changes in blueprints or substitutions of materials.

Now the technical staffers hope they can spot such troubles in advance and get them ironed out with local procurement offices.

• **Plant and Services**—Like other companies that have gone into mobilization planning to any extent, AMF is probably most specific on its arrangements for office service, plant supervision, and services such as water, fuel, and electricity.

The home office in New York City, a prime target area, could be moved right after M-Day to a branch plant in a safer area. Small groups of specialists are being trained at each plant to duplicate the duties of those at some other plant. This training includes such jobs as civilian defense and helping employees to find new homes after an attack.

Plant protection involves alternate sources of utilities and fuel. The Buffalo plant, for example, is planning to backstop its 500,000-gal. reservoir of water for firefighting with another 100,000-gal. tank that can, if necessary, feed by gravity. The main reservoir is ordinarily pumped by electric-powered units; the plant intends to install diesel-driven pumps as a standby unit.

• **Policing the Plans**—A key to the AMF mobilization plan is flexibility. Maxwell thinks it's unwise, if not impossible, to set up hard-and-fast rules at the top for every branch plant to follow. Problems differ, and several of the branches acquired since the war still follow their pre-AMF methods of management. So the branch managers are encouraged to tailor the over-all plan to their special needs.

Most branches will have special staff assistants to carry out the mobilization plan. To keep the plan continuously alive and effective, AMF is working out an inspection routine, based on a set of standards of preparedness. Then the home office can apply these standards to audit the planning down through the whole organization at intervals of about six months. Continual follow-up will also suggest where the master plan needs to be revised or updated.





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# FENCE

## NEW PRODUCTS



### Safety Helmet

Many plastics can't be used in or near operations requiring high temperatures because of the danger of the plastic catching fire. But General Electric claims this new, seamless plastic welding helmet is safe under such conditions. The company says it is heat-resistant, will not warp. The holes in the top keep the lens from fogging up, give the welder ventilation. It weighs only 29 oz.

• Source: General Electric Co., Schenectady 5, N. Y.



### Smashproof Windows

People seldom are injured by fire flaring up in an industrial plant. The real danger is in the explosion that follows. Papers or carelessly placed rags catch fire; the plant holds in the heat, permits it to build up and ignite gas or airborne dust. Pressure builds up, then the windows shatter or a wall blows out. That's what causes the casualties.

To prevent such explosions, Emery Industries, Inc., Cincinnati, is install-

ing safety windows. They are made of flexible plastic panes, rather than glass. Each pane is secured to its frame with putty. If pressures begin to build up, the panes pull away from their casings without shattering, permit quick release of pressure.

The panes are manufactured by General Plastics Corp., Marion, Ind., from Eastman Chemical's butyrate plastic, Tenite. Each pane is bound with a 3/8-in. metal edge to give it added rigidity.

• Source: Eastman Chemical Products, Inc., Kingsport, Tenn.

### Electro Magnetic Clutch

A good many clutches used in industrial equipment suffer from high maintenance costs, and too much time required in engaging and disengaging. Now Warner Electric Brake & Clutch Co., South Beloit, Ill., claims it has developed an electric clutch that overcomes both faults. It operates from a pushbutton control—similar to an automobile dashlight dimmer switch.

This is not the first electric clutch to be developed for industry, but it is based on a different principle from others in use today. The others use a mass of metal chips immersed in a fluid, create the clutching action by passing a current through an electric field, which causes the chips to pull together into a solid mass. The Warner clutch eliminates the fluid and the chips, works almost like an electric magnet. This makes possible a clutch no greater in diameter than a dime.

• **Iron Disk**—The Warner clutch consists of a washer-shaped iron disk attached to the motor, and round electromagnet attached to the drive shaft. Only a tiny gap separates the two; when current is passed through the magnet, the disk is attracted and engaged.

When the current is on full, the two are firmly engaged and the motor drives the shaft at top force. When the current is off, the magnet loses its attractiveness and motor and shaft are completely disengaged. In between, you can get varying degrees of clutching and slippage by varying the amount of current. This is rather like riding the clutch on a gear-shaft passenger car, except that it doesn't wear out the electric clutch.

Warner has announced that a machine tool company is using the clutch on some of its equipment. A farm machinery manufacturer, Deere & Co., Moline, Ill., plans to equip some of its combines with it. Warner says the same basic electric clutch principle is being developed for applications in the

aviation, automotive, and communications industries.

• Source: Warner Electric Brake & Clutch Co., 449 Gardner St., South Beloit, Ill.

## NEW PRODUCTS BRIEFS

Gasoline consumption can be measured within 1/100th of a gallon with a new device developed by Rhodes-Lewis Co., a subsidiary of McCulloch Motors Corp., 1220 Wilshire Blvd., Los Angeles. It is intended for individuals and fleet owners who want to check on engine and gas performance.

The first electric fork lift trucks to receive Underwriter Laboratories approval in atmospheres containing explosive vapors are now available from Clark Equipment Co., Battle Creek, Mich. The trucks contain a special frame, totally enclosed explosion-proof panel, and other safeguards to prevent spark-jumping.

A factory door designed to stand up under the constant pounding of fork lift trucks has been introduced by American Hard Rubber Co., 93 Worth St., N. Y. The door is made of a lightweight plywood, reinforced with steel, and covered with a hide of rubber.

To simplify the operation of a home movie projector, Ampro Corp., 2835 N. Western Ave., Chicago, is replacing six switches on its 1-mm. projectors with two control knobs. With these, you can control all of the basic steps in motion picture projection.

A fire alarm unit that gives a loud shriek when surrounding air reaches 140F, and operates on its own power, has been put on the market by Fyr-Larm Co., Inc., Summit, N. J. When a room gets hot, freon gas begins to escape from the unit; this sets off a 5-min. warning blast.

A silicone leather preservative has been introduced by Dow Corning Corp. It is called Shoe Saver. Like other silicone-based products, it is water-repellent, but it does not seal the pores. Air can get through, but water and oil stay out.

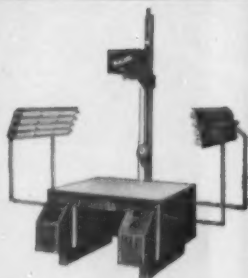
A new rust-preventive lead coating called Blakled has been developed by the U.S. Steel Supply Division, U.S. Steel Corp., Chicago. You can apply it to a wet surface, even to steel that has begun to scale. It dries in one hour, can be dipped, sprayed, or brushed.



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# ENTERTAINMENT



BOXER Panther plays with his kids . . .



. . . watches family at dinner. He's . . .



**RELAXING** on the day of a fight. Everything he does is aimed at getting ready for an evening bout with Jesse Turner in a Salt Lake City arena. Thus, he can't eat with the family at 2:30 p.m., but must eat his 2-lb. steak at 1 p.m., six hours before fight. Later he joins his father, an expugilist (second from left), and other relatives in chat about boxing.



JUST BEFORE FIGHT, ticket sales were brisk—4,163 tickets, \$8,700, in all.



**CHECKING IN** for weighing and medical examination, Panther (right) tells promoter Ray Arcel (hat, extreme left) and manager Pete Giacomini that he feels fine. Panther and Turner both weighed in at 157½ lb. That was a bit below Panther's best fighting weight. Panther got 20% share of after-tax gate.

## Buildup to a Fight—TV



**GETTING SET** in his dressing room, Panter has his hands wrapped in gauze by his managers, Giacoma (left) and Newman. The boxing gloves will be put on after he gets into the ring. Meanwhile, the manager's job is to soothe and coach their boy into a confident and aggressive frame of mind for the fight.

## Makes a Difference

BUSINESS WEEK • Feb. 27, 1954



A LONELY WAIT, then the call . . .



**TO THE RING** Now there's no turning back. It's up to Panter to win if he can, but above all to look good to the TV fans.

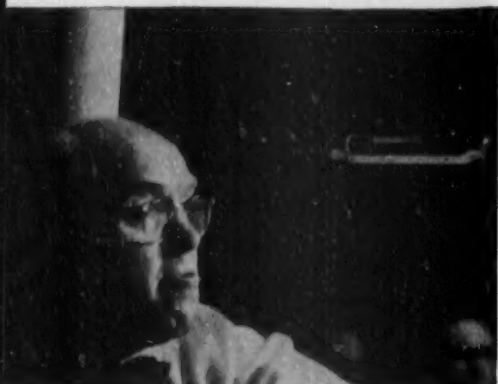
(Story continues on p. 108)



HIT HIM in the belly . . .



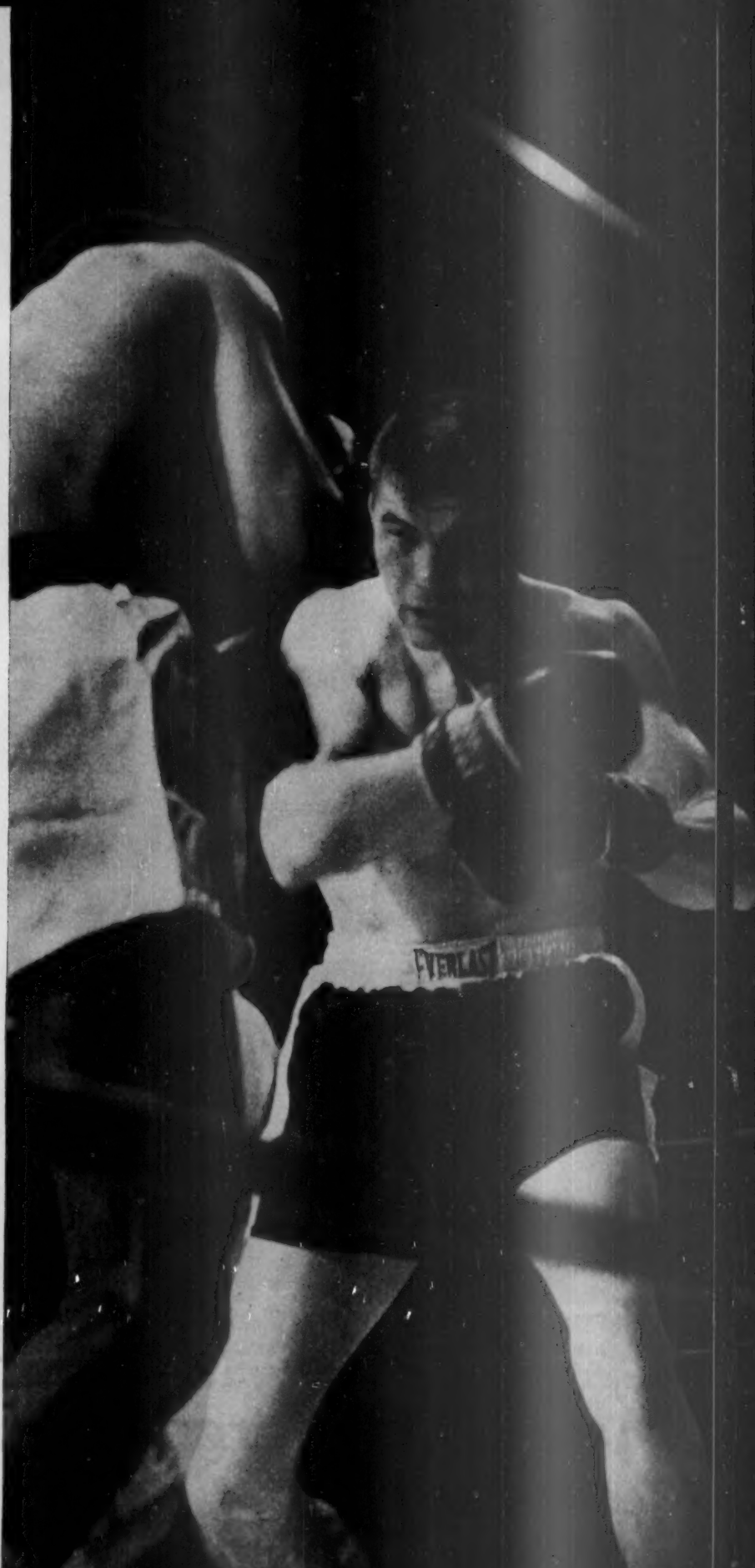
. . . in the belly, in the belly . . .



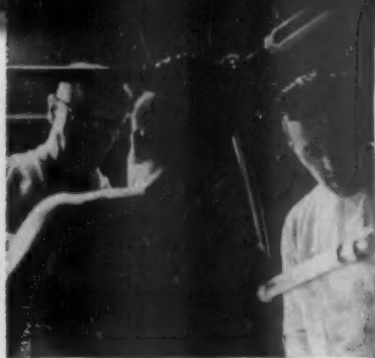
. . . punch—punch—punch . . .



"DON'T DROP your left." That's how manager Bill Newman (glasses) called signals for Panter during the Jesse Turner fight (right). Pete Giacomini is the other manager.







DURING FIGHT, managers give advice...



... tend to a small cut...



... give him a mouthful of water, and...



**WORK SOME MORE** on the eyebrow. Panter won the most rounds but lost to Turner (white trunks in view at left) on points in a close decision. It was a lively, bruising fight.



**LICKED** Panter's co-managers, Giacomo (left) and Newman, wait for Panter to finish his shower after the fight. They thought their man had won. Promoter Ray Arcel called it a good fight, promised Panter another match on TV.

## Boxing Is a Business

(Story starts on p. 106)

If a fellow with battered features sidles up to you on the street and offers to sell you "a piece of a fighter," pause a moment before you holler for the police. He may not be after the gold fillings in your teeth—he's probably an ex-pugilist with a business oppor-

tunity like Garth Panter of Salt Lake City (above).

Like any other business, boxing needs two things to develop a new product: (1) expert management, and (2) infusions of new capital from time to time. For a likely young fighter such



WORTH MORE OF YOUR TIME

## Specification Analysis can be profitable

Manufacturing processes are sometimes built around standard steel specifications in the mistaken belief that there are no alternatives. For example, some manufacturers grind cold rolled strip steel or the fabricated part to secure close gauge tolerances, while others use a trimming process to cut off "ears" on deep drawn parts. Both of these examples represent costly manufacturing operations which are often unnecessary if there is an understanding that cold rolled strip steel can be purchased to specifications which will not produce the undesirable characteristics you seek other methods to avoid.

Time spent with our specification engineers in reviewing your specifications for various types of cold rolled strip steel may develop recommendations for changes in your specifications which will have the effect of lowering your end product cost. "Specification Analysis" can be profitable. May we review your strip steel specifications and interpret them in terms of what CMP precision strip steel made specifically for your requirement can do for you?



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as Panter, ownership of a management contract may be split three or four ways, each time to attract new money or better coaching and promotion.

• **Making Good**—Panter, a 23-year-old middleweight (under 160 lb.) is in his fifth full year as a professional. Most listings place him as the 10th best middleweight in the world.

Counting this month's fight (pictures), he has a record of 52 wins (36 by knocking out his opponent), 14 defeats, and 2 draws.

Last year, Panter netted \$9,000 from boxing—before taxes—and another \$3,500 from part-time work for Utah Power & Light Co. That's not bad for a 23-year-old farm boy with only a high school education. It enables him to drive a 1954 Lincoln and to buy his family (wife and five young children) a new two-bedroom house in Salt Lake City.

• **Capital Gains**—None of Panter's backers got enough dividends to buy a Lincoln, but the value of their equity showed an encouraging gain through the year. On the year as a whole, they collected about \$7,000 out of Panter's \$16,000 gross winnings. Out of that they had to pay all training and travel expenses.

Panter's deal with his managers is this: They pay all his expenses in preparing for a fight, then get half of what he earns in the ring. It's on a fight-by-fight basis. Early last year, for example, Panter was still fighting for chickenfeed, and his managers waived their full percentage of the take. But after mid-year he began to draw sizable paychecks, and his backers flourished accordingly.

This month's bout with Jesse Turner of St. Louis (pictures) brought Panter slightly more than \$4,000—a rate of \$8,000 an hour, since the fight went 10 three-minute rounds. But backers got \$2,000 of this; training expenses for a fighter in Panter's class may run between \$600 and \$900.

• **The Backers**—Panter's owners reflect successive stages of his career. They are:

• **Tom Egbert**, his wife's uncle and the owner of a Salt Lake City confectionery store. Egbert was Panter's first manager and trainer. All he has left now, though, is a part of a half-share in Panter's contract. He acted as assistant to a co-promoter of the Panter-Turner fight this month.

• **Pete Giacoma**, a former boxer and a structural steel worker in Salt Lake City. After Panter's first few fights in 1949-50, Egbert brought him in as a more expert trainer and manager. Giacoma holds a half-interest in Panter's contract, minus the piece that Egbert retains.

• **Bill Newman** of San Francisco, who has a stable of 38 boxers. He was cut in with a half-interest at the point

where Panter had run through the local and regional opposition and needed a matchmaker with national and international contacts. Newman runs a gym in San Francisco, has offices there and in New York and Sydney, Australia.

## I. The Buildup

A young boxer is unlike most new products, or even other forms of entertainment merchandise. He can't be launched with a big splash—he has to be built up carefully, slowly, learning his trade as he goes along. He has to work his way toward the top, toward the big money, by successively fighting men rated better than he is.

• **Farm Boy**—Panter was born in Preston, Idaho, and grew up on his father's farm at nearby Dayton. In Dayton High School, he played guard on the football team and held the school's boxing championship. His father, Kenneth Panter of Pocatello, Idaho, was a boxer in the '20s and once was middleweight champion of Idaho.

Panter was a good student in high school. The seniors' yearbook referred to him as "such a deep thinker he has to have his shoes half-sole'd every month." After graduation, he went into the Army, where he fought several bouts at Fort Lewis, Wash.

When he left the Army, Panter worked on his father's farm, keeping up his boxing under Egbert's tutelage. He fought his first professional fight in Salt Lake City on Dec. 6, 1949, winning in three rounds. Two weeks later, he won a four-round decision.

• **Up the Ladder**—Through the next three years, with Giacoma and Newman joining his management, he fought two or three times a month in local and regional boxing shows. He was building up a record against youngsters like himself and oldsters who were on the downgrade. He was also winning fans in the bigger cities: San Francisco, Tacoma, Spokane, and Sacramento.

Panter met his first real big-name opponent last Mar. 16—in Butte, Mont. He lost a close 10-round decision to Carl "Bobo" Olson, who soon afterward won the world's middleweight title.

On his showing against Olson, Panter got a chance to make his New York debut in a series of four televised fights on Monday nights. Despite three losses in four bouts, he earned an even bigger chance, for he showed what boxing experts are learning to call "good TV style."

## II. Boxing & Television

Most sports promoters, of course, argue that television is killing the boxing game. "You can't make people pay for it if you give it away," they

The 599 people



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don't want to  
talk to

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Your voice, changed into electrical impulses of specific frequencies, is fed into a pencil-size tube with just one wire running through the middle. Along the way your voice may be joined by 599 others and, together, all speed from city to city.

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$\frac{1}{3}$  the floor space needed for filing cabinets, its mechanized action saves from  $\frac{1}{4}$  to  $\frac{1}{2}$  the *cost of operating* your files.

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chorus. And they may be right. Certainly the little local boxing shows are badly hurt—almost any fight fan would rather watch a big-name bout on TV than pay his way into a fifth-rate arena to see tyros and has-beens.

Long-range, boxing will undoubtedly suffer from the massacre of the local club shows—it will be short of training ground and a grass-roots audience. At the same time, television promises to give unexpected short-range benefits: steadier and better pay for men of Panter's caliber, more respect from the general public, a more businesslike type of operation, free from a poolhall atmosphere.

Boxing is creating an audience undreamed of in the legendary Golden Age in the '20s—the Dempsey-Tunney-Leonard era. In many viewing areas, you can watch boxing on TV every night of the week except Sunday. And the audience for Panter's fight this month could have been as high as 20-million, coast to coast. A good-sized crowd of 4,163 paid some \$8,700 to see the fight in Salt Lake City's Utah State Fairgrounds Coliseum.

• **TV Style**—The TV audience is a critical one. It sees the ring action close-up, and it can detect either clumsiness or lack of spirit. Shortcomings of skill it may forgive, but dull action—never. That's where Garth Panter's reputation for good TV style comes in. He makes mistakes, as any fighter will at his stage of development, but he never looks bad for want of trying.

• **More Gold**—In compensation for setting up new standards for boxers, TV assures them a better payoff. On the Monday night series from Eastern Parkway Arena in New York, a main-event fighter gets a minimum of \$2,100. The Pabst Blue Ribbon bouts on Wednesday nights and the Gillette bouts on Friday nights pay \$4,000 minimums. Phillies Cigars' Saturday night fights guarantee \$2,600, and fighters, as in Panter's case this month, may also share in the gate receipts.

Panter's father, a fair fighter in his day, is impressed by what that means to a boxer's earning power. "You get \$4,000 a fight," he told Garth before the Turner bout, "and I was hitting a real jackpot if I got \$40."

• **The Big Time**—Panter's showing on the Monday night fights earned him a shot on Gillette's Cavalcade of Sports Oct. 23, a \$4,000 minimum. He whipped high-ranked Pierre Langlois of France. A month later, he returned to Salt Lake City as a bigger drawing-card than ever, to knock out Grover Jackson in the fourth round. Then he went to Detroit for a \$4,000 Pabst Blue Ribbon bout with Norman Hayes on Dec. 2, winning again.

On Jan. 8 he fought Joey Giardello, ranked No. 3 among middleweights,

in another Gillette show. He lost in five rounds by a technical knockout (a TKO occurs when the referee stops a fight on the ground that a fighter is unable to continue or to defend himself). Next came the Turner match.

### III. Preliminaries

Panter started training for the Turner fight only a few days after his setback by Giardello. Pete Giacomini directs his training; Bill Newman, the other manager, handles the matchmaking and other business matters.

• **In Training**—Since he keeps busy in the ring, Panter has little trouble training for a fight—his weight stays about right, and his wind is good. For the first two weeks of his training, he jogged two miles a day near his home in the morning, punched the bag or skipped rope or did calisthenics at a downtown gym for an hour and a half in the afternoon.

Two weeks before the fight, he began boxing each afternoon with a sparring partner. For boxing Panter four 3-min. rounds a day, Benny Flake received \$10 a day and a chance to appear in a secondary bout with Panter and Turner.

Under the terms of their contract with Panter, the managers bought the boxing gloves (\$30 a set) and other equipment, paid for the gym and the sparring partner, hired the seconds for the night of the fight (these ringside aides get from \$25 to \$100 per fight).

• **The Business Side**—Meanwhile, other people on the business side of boxing were also busy. Ray Arcel of New York, trainer of more than a dozen world champions, and Charles Oliver, Salt Lake City restaurant owner, were co-promoters of the Panter-Turner fight. Arcel runs the Phillies Cigars' TV fight shows for the sponsor, Bayuk Cigars, Inc., of Philadelphia. Oliver, who occasionally promotes sports events locally, had Tom Egbert to help in publicity, advertising, ticket sales, and over-all arrangements.

The promoters budgeted their expenses like this: \$1,000 for advertising, \$1,100 to rent the Coliseum, \$700 to bring Turner, his manager, and his trainer from St. Louis; from \$100 to \$250 apiece for fighters in the four secondary bouts, \$300 to a Salt Lake VFW post for ushering, and a hefty miscellaneous fund for a doctor, dressing room assistants, referee, judges, ticket sellers, and police.

• **Payoff**—After expenses and admissions taxes were paid, the promoters divided the kitty. Oliver said he and Egbert got about \$800 apiece for their three weeks of time and money invested. But they had the satisfaction of helping to stage a nationally televised fight and of gaining prestige that should help them in future local fight promotions.

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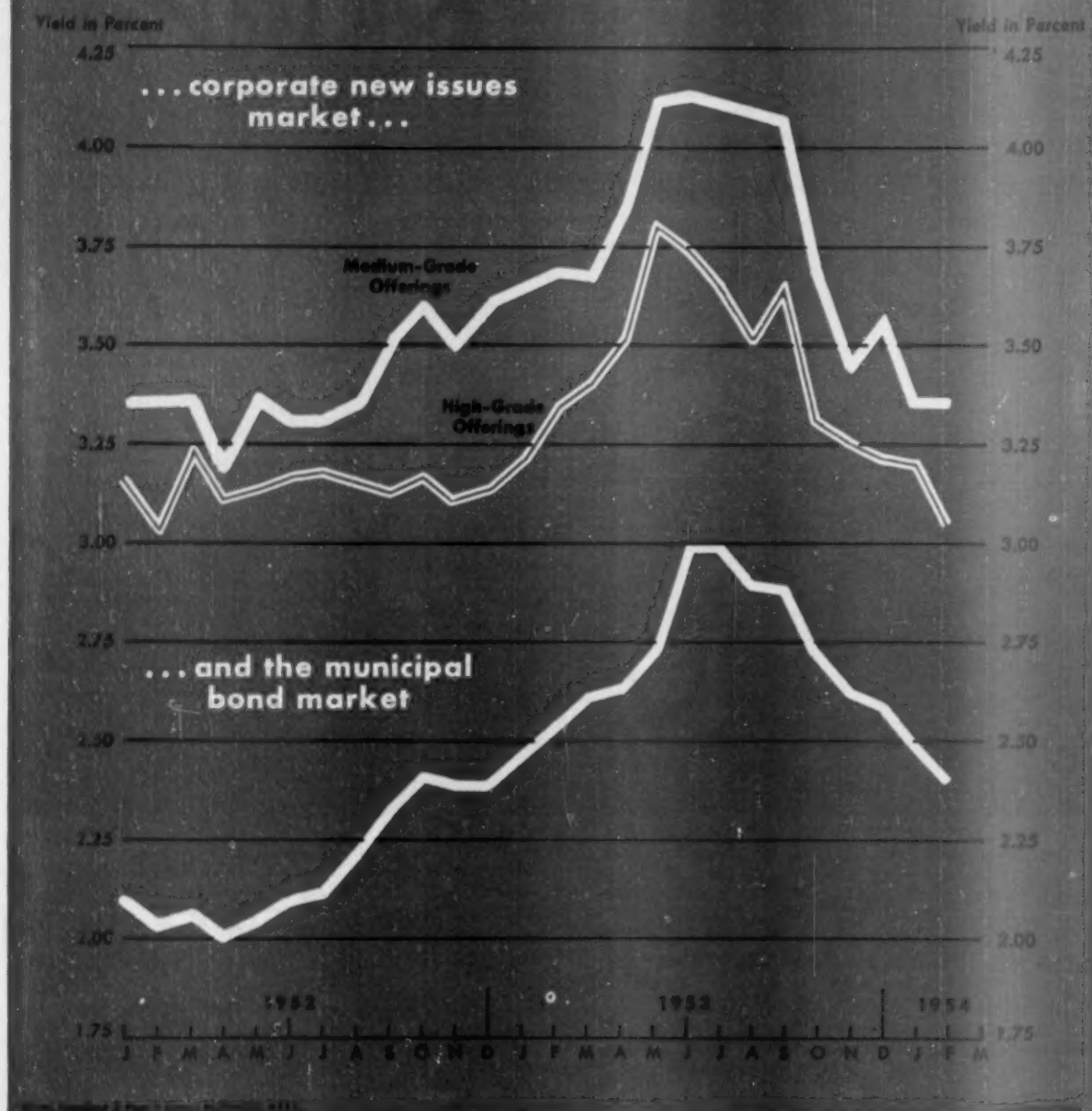
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# FINANCE

## How money rates have dropped in the ...



## The Dilemma: To Borrow Now or Later?

Corporate and municipal finance officers are catching up on some of the sleep that they lost early in 1953. Since last summer they have been soothed by a drop in long-term borrowing costs that has been just as steep as the six-month rise that preceded it (chart, above).

Cheapening rates have soothed the financial nights, but they haven't removed all the worries. In one sense, the worry has just reversed direction. A year ago, the borrowing expert, in his quest for the best possible terms, wondered how high the ever-rising interest rates would go. Now, his problem is

to figure just how long they will sink.

The problem may seem picayune to the short-term personal borrower. But it's serious when you are borrowing millions of dollars, and are faced with interest payments over long years. Thus, a \$10-million issue of 30-year bonds that bear a 3½% coupon rate



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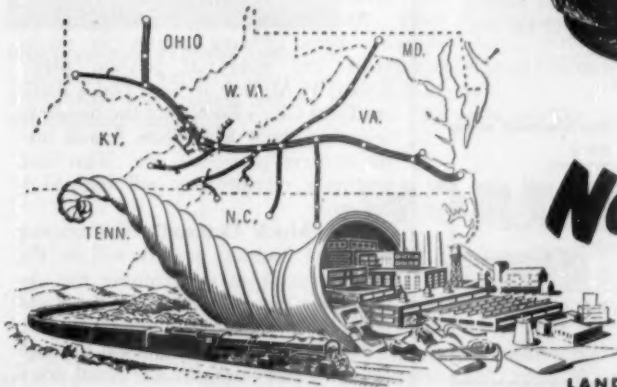
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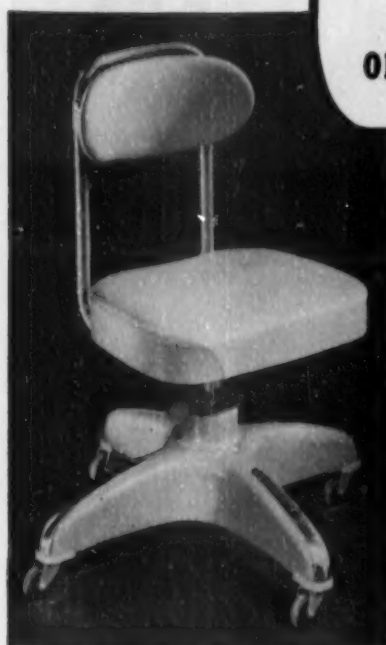
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involves interest payments of \$9,750,000 before the bonds mature. If your borrowing rate dropped by a mere one-eighth of 1% the payments would be cut by \$375,000; if the drop was  $\frac{1}{4}$  of 1% the saving would be doubled. Expressed in percentages, a rate drop from  $3\frac{1}{4}$ % to 3% figures out to an 8% reduction in borrowing costs.

• **Now or Later**—As of now, the finance officer faces this tough decision: Should he speed up his 1954 financing to catch the current rates—so temptingly lower than last spring's. Or should he sit it out a little longer, in the hope of a further drop?

The professional borrower had no such worry back in the days of the New Deal-Fair Deal cheap money policy. He knew that money rates would either be sinking, or would be held steady by government action. Before that party ended, the Union Pacific was able to sell 30-year bonds in the new issue market offering a yield of only 2.42%, one of the lowest on record.

That sort of market no longer exists. But the present market is by no means wholly unmanaged; money rates aren't allowed to yaw violently under the gust of supply and demand. That became evident last spring, when the Federal Reserve Board went swiftly into action after rates showed signs of bursting through the roof. The Fed bought Treasury issues to steady the government market, and cut reserve requirements to boost the lending power of the banking system. Those moves soon started the downtrend in rates that business has since been enjoying.

• **Lots of Money**—Most experts think that oodles of investment money will be available this year. It is reliably estimated that there was a \$10-billion collective gain last year in mutual savings bank deposits, outstanding shares of savings and loan associations, and in the admitted assets of the life insurance companies. A continuation of the recent business slump might make it impossible to duplicate the \$10-billion figure this year, but the pros think it would take a really sharp downturn in the economy to check the inflow of money to a material degree.

Another source of investible money has been growing rapidly in recent years: the industrial pension plans. Robert F. Murray of New York's Bankers Trust Co., a Boswell of the pensions, says that about \$14-billion flowed into the trustee plans last year. This year, he thinks, receipts may well reach \$1.4-billion.

• **How Much Demand?**—The coming course of business activity will be the biggest factor in determining the demand for new money in 1954. Right now, the picture looks about like this:

Few insiders expect demand to reach the record levels of 1953. Indeed, fiscal

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officers of state and local governments are the only type of borrowers who are expected to be busier this year than last. How much busier is an open guess. It's easy to find pros who will predict that the total will "materially," or even "substantially," top the \$55-billion-plus municipal offerings of 1953.

There is much less confidence in the size of corporate new money financing even though the utility industry will continue an active seeker of new capital (BW—Feb. 20 '54, p. 56).

Some authorities think there may be as much as a 20% drop in new issues of stocks and bonds. Their reasoning is not that there will be a sharp fall in manufacturers' expansion and modernization, but that an increasing share of expansion costs will be financed out of cash balances swelled by inventory reduction and by larger noncash book charges against gross revenues—principally depreciation.

- **Mortgages**—Real estate mortgages are expected to sop up a huge part of this year's investible capital. Yet, few people believe that mortgage debt will continue to increase at the \$9-billion-to-\$10-billion clip it has maintained for the past four years. And there are those who think there may be a 10% or 15% drop below the \$9.3-billion growth estimated for 1953.

- **The Treasury**—There are few firm foundations on which to rest any guess as to the size of Treasury financing (BW—Feb. 20 '54, p. 30). But a number of Wall Streeters think it's an even bet that 1954 new-money borrowing won't top the 1953 figure. Even if they are right, it is no sign that Treasury borrowing won't have an effect on the money market. In fact, right now there is a fine illustration of the importance of Treasury planning.

Prime grade industrial issues are acting more "tired" than they have for a good while. Partly, this is due to the need for a consolidating period after many weeks of successive price rises. But the experts say that a very big factor is the likelihood that the Treasury will soon launch a new long-term issue.

Up to now the Treasury has said nothing about its plans for this offering. Probably, decisions won't be made until the matter has been informally threshed out with institutional investors. But the Street is already guessing: (1) maturity estimates range from 25 years to 30 years; (2) coupons are variously set at 3% and 3½%; (3) the total amount is estimated all the way from \$1-billion to \$2-billion.

- **Syndicates**—Despite the occasional lack of buoyancy in the market lately, investment banking syndicates are falling all over each other in bidding for such issues as are available. They're fighting their bids with sharp pencils,

too. Last week a winning group was perfectly happy to offer publicly \$60-million of new 3½% 30-year Pacific Gas & Electric Co. bonds at a price that afforded buyers a yield of only 3.07%.

It is true that this yield is seven basis points higher than one offered two weeks ago on a similarly rated utility. But the earlier offering was only one-fifth the size of PG&E's, and proved to be a very sticky selling job from the moment it hit the Street.

Close bidding of that sort was common in the days of the cheap money policy. With everyone convinced that rates would continue downward, it didn't matter if you were ahead of your market for a time. When bonds did prove sticky, they were simply put on the shelf for a few weeks until the downward movement of money rates brought the going yield down to your level.

Some people in Wall Street think there will be a return to that sort of seller's market, unless demands for business loans swing upward sharply.

## Plan for MOP

**Reorganization proposal for the Missouri Pacific is unfavorable to holders of common stock—and to Young.**

Two Interstate Commerce Commission examiners last week took a fourth crack at setting up a reorganization plan for the troubled Missouri Pacific RR. The latest proposal, which must be approved by the full commission and the Federal District Court in St. Louis, still leaves present holders of MOP common—biggest among which is Robert R. Young's Alleghany Corp. (BW—Feb. 20 '53, p. 34)—pretty much out in the cold.

Under the plan, ownership of the reorganized road would be vested with holders of the preferred stock. Alleghany and other common shareholders would get only a very remote interest.

- **Left-Handed**—Young was instrumental in killing an earlier reorganization proposal made in 1949. He claimed that earnings of MOP during the wartime years definitely entitled common stockholders to a measurable interest in any new company set up to take over the property. The new proposal recognizes Young's position only left-handedly. It provides for an exchange of the common into warrants. These would be exchangeable into class B common shares only if the road's average earnings, before fixed charges and taxes, total \$76-million in each of seven consecutive years during



## SHOCK-ABSORPTION...

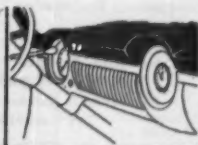
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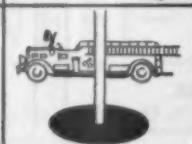
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the first 15 years after its reorganization.

Such earnings are unlikely. Since 1939, MOP has hit this level only in two years—both during the wartime peak. In 1952, MOP earned \$52.9-million before fixed charges and taxes. Last year, earnings were \$44.7-million.

• **Control**—The new plan proposes that control of the road will fall, at first, to a board of directors chosen by the bondholders. After the first year, holders of class A common will elect the board.

Who will get this class A common? More than 90% of the 2-million shares made available under the plan will go to present preferred stockholders. These stockholders will get one share of new class A common for each \$100 of claims, including back dividends. These claims now amount to about \$160 a share. After the exchange, the class A common will be entitled to \$5 of annual dividends per share before any dividend can be paid on class B common.

It's hard to see how this setup would let Young exercise much control over the railroad—for several years at least. It's not hard to see why the plan isn't to his liking. He said last week that he will have plenty to say about the matter. The plan can still be killed, like its predecessors, by ICC or the courts.

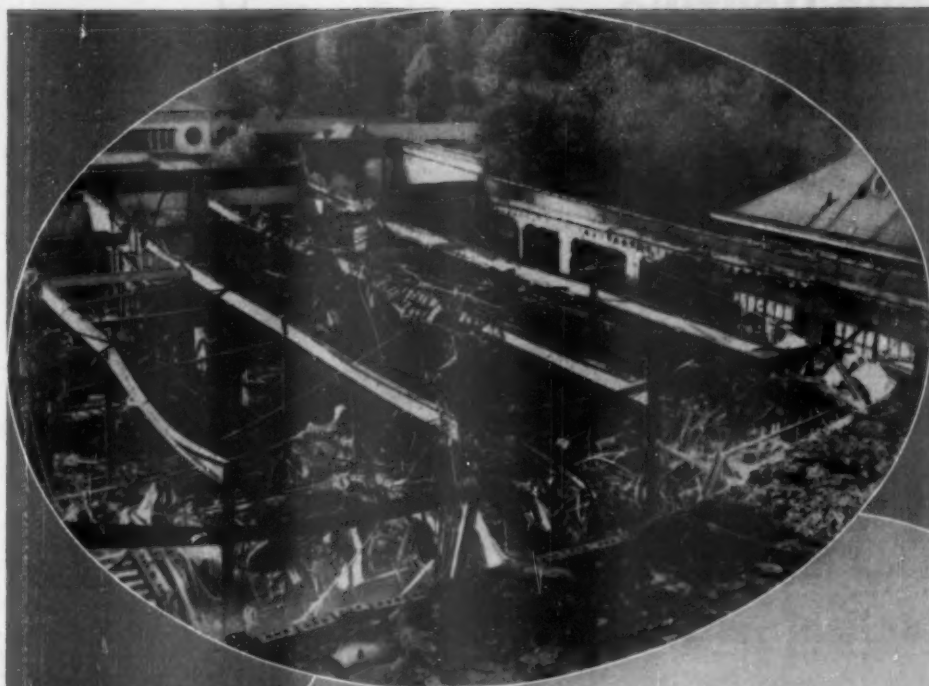
## FINANCE BRIEFS

Four months of feuding between Alfred J. Bohlinger, New York State's superintendent of insurance, and Thomas I. Parkinson, chairman and chief executive officer of Equitable Life Assurance Society, ended last week with Parkinson's resignation. Parkinson, who had led the company for over 20 years, came under fire last November when Bohlinger accused him of nepotism and other managerial irregularities (BW—Nov. 14 '53, p. 34). Ray D. Murphy, former president, takes over.

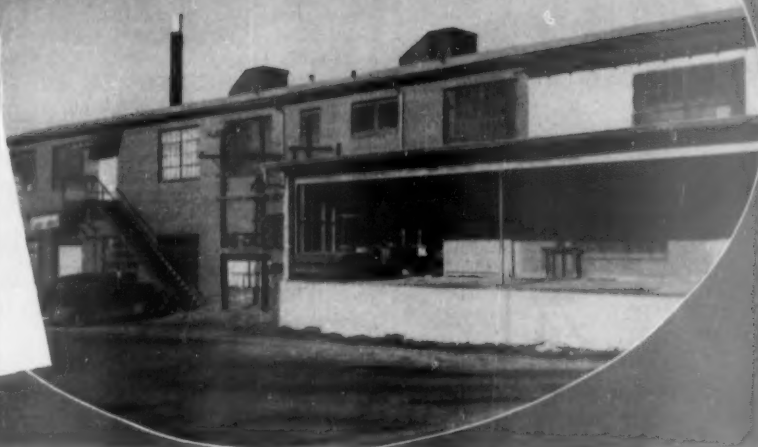
The short sales total on the New York Stock Exchange hit its highest peak in almost 22 years on Feb. 15. There were 2,722,944 shares—158,477 above the previous month. Biggest short interest was in General Motors and New York, New Haven & Hartford RR.

The big Treasury refinancing (BW—Feb. 13 '54, p. 66) ended up with a total of \$18.2-billion worth of certificates and bonds subscribed, according to the final breakdown. This is \$184-million over the preliminary figure. Of the total, \$11.2-billion went into the new seven-year-nine-month 2½% bonds, and \$7-billion into one-year 1½% certificates.





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## Trusts Merging

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Some Wall Street experts think so.

The main reason is that like everything else, the cost of running investment companies—both closed end trusts and mutual funds—has risen.

These increases have hit the little funds the hardest. It costs just about as much to set up and operate research and administrative facilities for a small company as it does for a large one.

Largest merger planned is that of Connecticut Investment Management Corp., a closed end investment company founded in 1931, with Broad Street Investing Corp., a mutual fund, which dates back to 1930.

• **The Deal**—The merger proposal, which is to be submitted to stockholders shortly, calls for the exchange of the Connecticut company's assets at market value for Broad Street Investing shares of equal asset value.

The Connecticut company at the yearend had 2,105 stockholders, and assets of \$735,000.

Broad Street Investing has 9,970 stockholders, and assets of close to \$36.2-million.

• **Operation**—The Connecticut company owners have good reasons for approving the merger:

• Connecticut Investment Management Corp.'s operating expenses during the last six months of 1953 amounted to 31.6% of gross income.

• Broad Street Investing operating expenses during the same period, on the other hand, were 7.8% of income.

• **Better Backing**—The principal reason that the Connecticut company's operating expenses are so high in relation to income goes back to the fact that it is a small company, providing its own investment research and other essential facilities.

Broad Street Investing, on the other hand, is a member of the Tri-Continental Group of investment companies, and as a member its investment research and administrative facilities are maintained by Union Service Corp.

Broad Street Investing is one of four companies that own Union Service. The latter, operating under a nonprofit arrangement, supplies investment research and other services to the companies it serves at cost.

• **A Trend**—A spokesman for Broad Street Investing Corp. indicates his



*Shipping facilities?*

*Take your pick.*



No small factor in the astounding industrial growth of the Delaware Valley is the unexcelled transportation the area offers to both shipper and buyer.

Here are miles of modern inland docks and piers providing shipside loading facilities . . . main line rail service to all parts of the nation . . . plus an extensive network of super-highways for fast motor freight haulage.

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Delaware Valley gives us complete access to this convenient rail, water and highway transportation. It means that we are in an ideal position to efficiently and economically serve your needs for steel and steel products.

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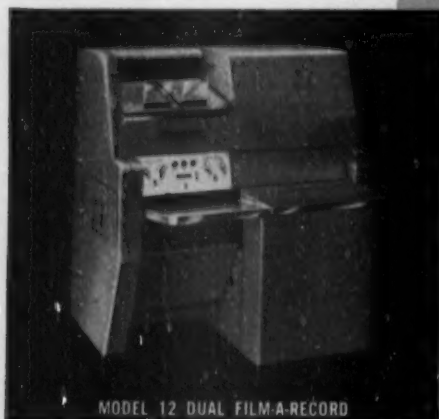
**IF YOU'RE IN RETAIL SALES, and list individual purchases on your invoices —**

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PROFIT-BUILDING IDEAS FOR BUSINESS

company may absorb more small trusts.

"It's a good arrangement, both for the small company and for us," he declared. "The little company gets the benefit of our low ratio of expenses to income. We increase our assets."

He added that it would cost Broad Street Investing little more to handle a \$100-million investment portfolio than its current \$37.2-million worth of security holders. This was the third merger for Broad Street Investing in the past eight months. Last month it absorbed Ferncliff Trading Corp., a private holding company. And last June, it merged the Howe Plan Fund, a mutual fund, into its structure.

• **More Coming**—Another pending investment company shuffle involves the George E. Roosevelt and Hugh W. Long interests. The Roosevelts and the Long organization have both been in the mutual funds field for years. Both fled New York in 1952 when the city doubled the tax on financial companies. They ended up in two old adjoining mansions in Elizabeth, N. J. To streamline their operations and cut operating costs for both, they have drawn plans to be submitted to shareholders that would call for the following:

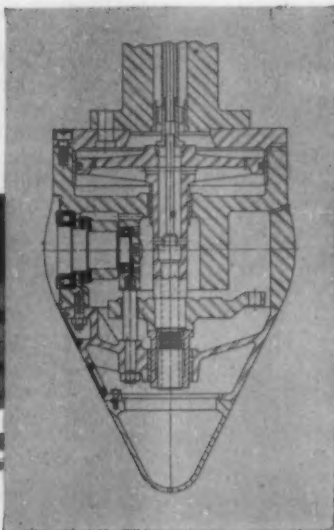
**Fundamental Investors, Inc.**, a Roosevelt fund, is to acquire by merger the assets of Investors Management Fund, another Roosevelt company. This will increase the assets of Fundamental Investors, Inc., to around \$180-million.

**Diversified Funds, Inc.**, which is made up of three funds, would be superseded by Diversified Investment Fund, Inc. Into this would be merged the assets of Diversified Common Stock Fund on an asset value basis. Shares of Diversified Growth Stock Fund, another component, would be exchanged for shares of a new company with the same name and asset value per share.

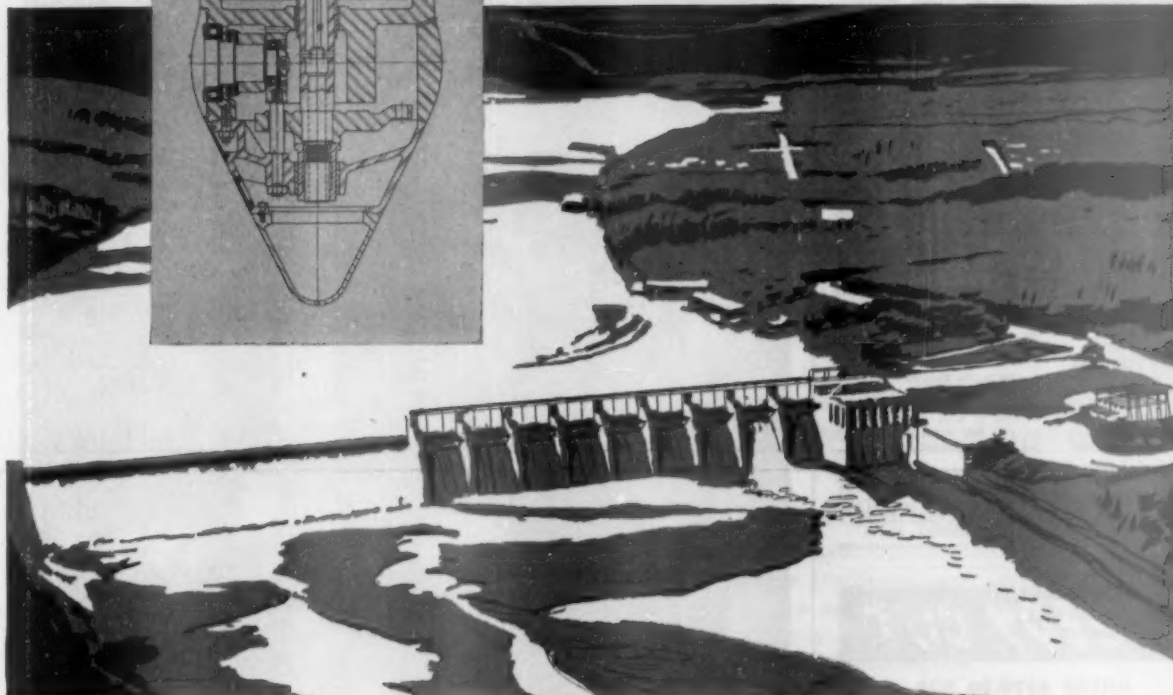
**Investment Management Co. Inc.**, headed by George E. Roosevelt, chairman, and W. Emlen Roosevelt, president, which handles investment research for the Roosevelt funds, would absorb research personnel and facilities of Hugh W. Long & Co., which has been acting as adviser to the two Long funds, Diversified Funds, Inc., and Manhattan Bond Fund. Investment Management Co. then would become investment adviser to all of the funds sponsored by the Long organization, whose assets total \$257-million. The Hugh W. Long company would continue to serve all the investment companies as underwriter.

William Gage Brady, Jr., formerly chairman of National City Bank of New York and now chairman of Fundamental Investors, who worked out the integration plan, would become chairman of all the funds and also of Hugh W. Long & Co.

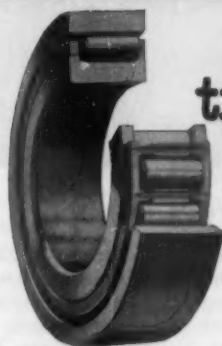
# TORRINGTON BEARINGS AT WORK



*TORRINGTON Radial Roller Bearings and Roller Thrust Bearings installed in turbine-blade runner hubs at Texas' Austin Dam demonstrate the versatility and efficiency of precision-ground TORRINGTON Bearings. Installation by Newport News Shipbuilding & Drydock Company.*



## Fifteen years of



## trouble-free service!

The two Newport News adjustable blade turbines installed at Texas' Austin Dam in 1939 were equipped with TORRINGTON Bearings in the runner hubs. Today, *fifteen years later*, those bearings are still giving efficient, trouble-free service.

And little wonder. For TORRINGTON Bearings are precision ground from the finest of bearing-quality steels. They are carefully heat treated by the most advanced metallurgical methods. In most designs their one-piece cages are cast of

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In every kind of heavy-duty application, TORRINGTON Bearings assure high load-carrying capacity, maximum rolling efficiency and resist-

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### Motor Repairman Says KLIXON Protectors Turn Major Repairs Into Little Ones

DETROIT, MICH.: Mr. Bruce W. Palmer, pres., Palmer Electric Company, oldest electrical contract and repair business in Detroit—knows how well Klixon Inherent Overheat Protectors prevent motor burnouts. Uses them himself in manufacturing the Palmer Beverage Coolers. He says:

"No device is more secure for protecting motors against burnouts than a KLIXON Protector. We find motors protected with a Klixon usually require only minor repairs, while those not so equipped develop major repair problems."

The KLIXON Protector, illustrated, is built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer preference, reduced service calls and minimized repairs and replacements, it will pay you well to ask for equipment with KLIXON Protectors.



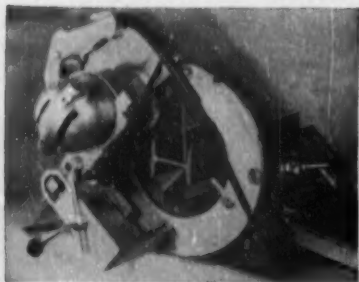
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## LOCAL BUSINESS



### Off-Street Parking

FAIRMONT, W. VA.—Citizens of Fairmont don't claim to have the best parking setup in the country, but they are sure that no city in their population class (30,000) has any better. Fairmont is split right down the middle by a valley. The north and south halves of the business section are linked by a bridge over the valley, which is more than 100 ft. deep at this point. Farther west, a couple of major roads dip down into the valley.

Back in 1945, G. W. Harr, then president of Fairmont's Rotary Club, got a brilliant idea: Why not pave the floor of the valley and turn it into a parking lot? It took a long while to sell the idea, but it finally went through in 1950, when \$175,000 was raised through a 30-year bond issue.

The lot has a capacity of 1,350 cars. Rate is 15¢ for the first hour, then 5¢ an hour up to a maximum of 35¢ for all day. Monthly cards are available for \$5.

Once the motorist has parked his car, there's an elevator to take him up to the viaduct above, just half a block from Fairmont's business center (picture).

The "basement parking lot" has been a great success. More than 250,000 cars have used it in the three and a half years it has been open; close to 2-million people have ridden in the elevator.

There is little question that the lot has pulled a lot of new business, particularly retail business, into Fairmont. Miners and farmers from nearby communities are getting the habit of coming to Fairmont for shopping and for amusements. Women especially like



# Here's Why the Chemical Industry is Interested in Plant Sites Along the C&EI

**\*"Industrial Fore-Site"** directs the Chemical Industry to examine communities served by the Chicago & Eastern Illinois Railroad... to find new profit opportunities for plants pointed up by the economic advantages of this Indiana-Illinois area.

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Private public utilities with millions of kilowatts capacity offer industrial power at attractive rates. Generating stations under construction will augment the supply of efficiently produced, low-cost power.

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A large, native-born, experienced labor force is available. Harmonious labor-management relations in most manufacturing plants insure smooth, uninterrupted operation of facilities.

## FUEL



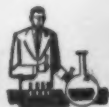
Coal produced in this leading mining region and oil from its wells or pipelines are economical fuels and possible chemical raw materials. Major natural gas and petroleum products pipelines traverse the area providing bulk supplies of refined fuels and the basis for chemical processing.

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The Ohio, Mississippi, and Wabash Rivers have virtually unlimited water for industrial purposes. Strategic, river-side sites are available.

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Abundant high-calcium limestones, fluor-spar, dolomite, zinc ores, clays, sand, silica and other local mineral deposits greatly expand the area's chemical processing potentialities.

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Situated in the Nation's leading industrial and agricultural market area, this Indiana-Illinois region is served by 20 major railroads with all modern facilities. Barge lines and river-rail transfers provide direct water access to domestic and foreign raw materials. A network of highways furnishes routes for many motor transport carriers.

**\*"Industrial Fore-Site"** is a shrewd management quality that gets the jump on competition by choosing plant sites with superior economic advantages.

For factual information on these outstanding industrial opportunities in this Indiana-Illinois area, write in confidence to Chief Economist:



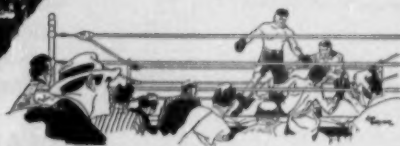
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# GRANTLAND RICE'S ALL TIME HIGHLIGHTS of SPORT



## DEMPSEY'S HARDEST FIGHT



That "coming events cast their shadows before" was proved in the battle between Jack Dempsey and Johnny Sudenberg, in 1916. Both fighters were almost unknown. But Dempsey's savage courage and ruthless punching were already evident.

Dempsey and Sudenberg, another hard, hungry slugger, spent the entire fight knocking each other down. But neither one would stay on the canvas. Dempsey was battered down at least seven times. But each time he came back before the fatal count of 10.

They fought the entire ten rounds to a decision. And Dempsey won. It was probably the most important fight of his career. If he had stayed down, there might never have been a Manassa Mauler.

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More about this and other all-time great fights on Grantland Rice's illustrated Record Sheet of "All-Time Great Ring Battles", attractively printed. Ask your printer or write on your letterhead to Eastern Corp., Bangor, Maine.



the lot, because the entrance road avoids the congested city streets.

## Fare Enough

**NEW YORK CITY** — One-way streets have been the rule on almost all of Manhattan's crosstown streets for a good many years. More recently the city has tried the one-way plan on four north-south avenues, two on each side of town—also successfully. This week it appears almost certain that two more avenues, closer to the heart of the city, will also be made one-way thoroughfares.

The present one-way avenues are 1st, 2nd, 9th, and 10th. Two years ago, plans were all set to add 7th and 8th Avenues to the list. But opposition from New York City Omnibus Corp., which has franchise rights on both streets, caused a last-minute rescission of the plans.

Now the city plans to put substantially the same program into effect around May 1—and it doesn't look for any active opposition from the bus company this time. Reason: The company is operating under an interim 13¢ fare, which expires Apr. 30. If it were to insist on the letter of its franchise agreement with regard to two-way operation on 7th and 8th Avenues, the city would have a perfect right to insist on the letter of the agreement with regard to fares, too. And the franchise specifies a 5¢ fare.

## In New Uniforms

**BALTIMORE** — For the second year in a row, a new city is coming into the major leagues. Last year the National League Braves, formerly of Boston, moved to Milwaukee. Their attendance zoomed to a record-breaking 1.8-million. (It had been less than 300,000 the last year in Boston.) And the team zoomed to a second-place finish. It had finished seventh in 1952.

This year the American League Browns have become the Baltimore Orioles. And Baltimore's citizens are wondering whether history will repeat.

There's a good chance it will on the first count, at least in part. Last year the last-place Browns played to just over 300,000 paid admissions; this year's advance sale has already passed 400,000, and general manager Art Ehlert expects it to top 600,000 before the season opens. The second part is less certain. Most sportswriters seem to feel that the Orioles, despite a few trades, will still be only the Browns in new uniforms.

But they said the same thing last year about the Braves. Perhaps the psychological boost of having a parkful of fans rooting for them will work wonders with the Orioles, too.

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One of many S & S automatic filling machines, this model HG-84 Duplex Filler quickly and accurately fills powder and granular products at the rate of one container per second.



Trade Mark

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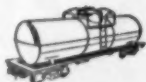
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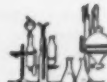
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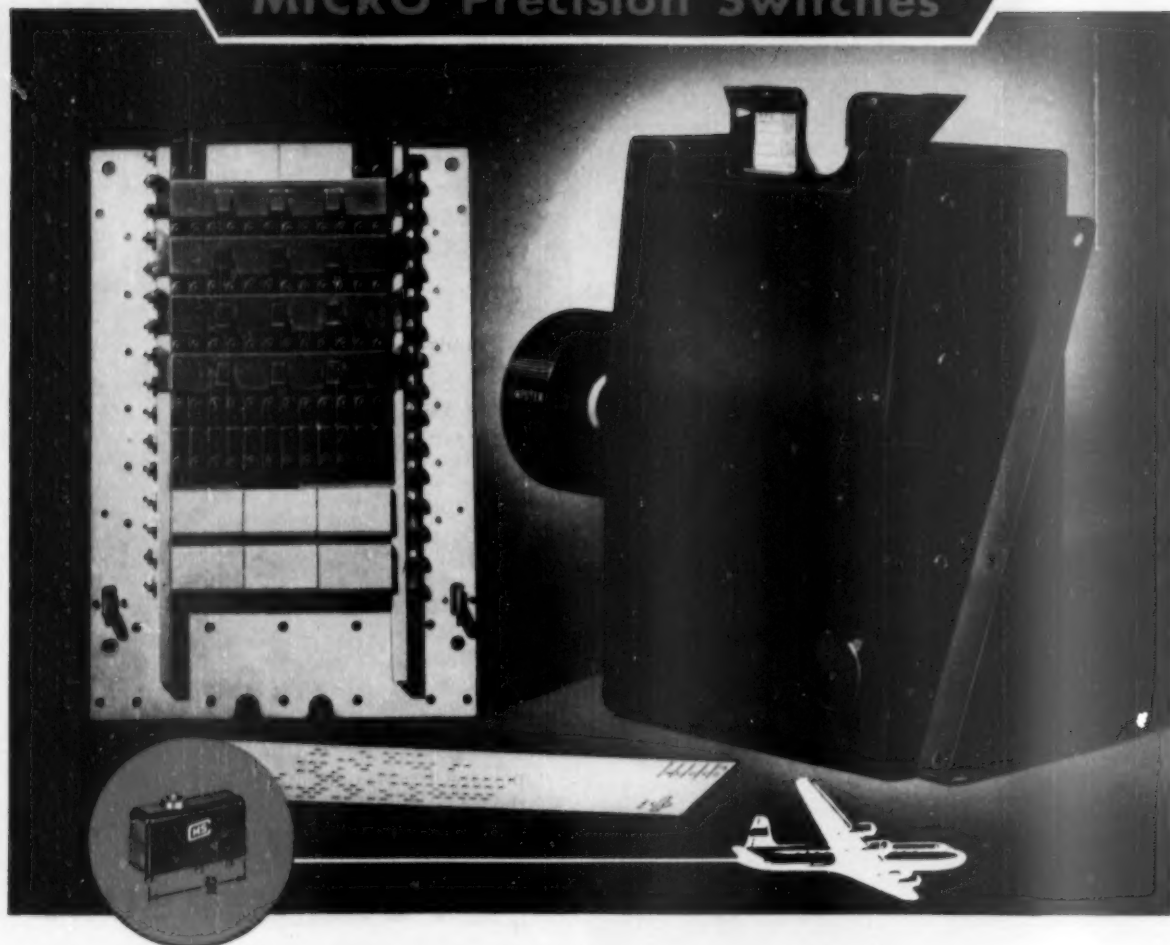
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### Collins Radio uses 64 MICRO Subminiature Switches in a space that you can cover with your hand

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These ultra-small, sensitive switches are mounted on the inside panel of the card reader of the Collins Airborne Navigation System. This device gives the pilot a continuous fix along his flight course line. The switches are actuated by the business machine-like punched holes in the navigation card. They transfer information from the cards to the computer.

The entire panel on which these 64 MICRO

subminiature switches are mounted measures but  $7\frac{3}{4}$ " by  $5\frac{3}{4}$ " and emphasizes the ability of these small switches to give long-life, dependable performance in delicate equipment where small size and light weight are important factors.

Whether the demand is for a small switch like the MICRO subminiature or for precision switches of widely varying characteristics, management men and their design engineers have learned to count on MICRO SWITCH for many years. Experienced field engineers in 16 conveniently located branch offices are available to help you select just the switch you need. We invite your consultation.

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# INTERNATIONAL OUTLOOK

BUSINESS WEEK

FEB. 27, 1954

A BUSINESS WEEK

SERVICE

There's a new look to United States policy for the Far East this week.

Our strategic and political emphasis moves now from North Asia—Korea—to Indo-China and South Asia.

This is not a sudden development following up the Berlin talks; planning along these lines has been a long time cooking. Our decision to meet with Red China at Geneva is an unavoidable—and expected—concession made to gain Western unity. It is not a compromise with communism—for all the uproar in Congress.

It's likely that Geneva will formally establish the Korean truce (page 31).

Some kind of agreement, ratifying the stalemate, is probable—and without a great deal of delay. Neither East nor West has any stomach for renewed fighting. Syngman Rhee's star is declining.

Unification of Korea is written off for a long time to come.

Indo-China is something else again. Geneva will deepen our involvement in the war, put us side by side with France.

Washington considers an anti-Communist victory there—or at least prevention of a Red victory—our Number One task in Asia. We are no longer merely supplying money, machines, and morale: The U.S. now has a prime political responsibility for the Indo-China war.

France has given up sole responsibility by default. It is too weak politically to negotiate alone with the enemy.

The U.S. has no illusions about Communist intentions in agreeing to talk Indo-China at the Geneva meeting.

Moscow wants to use the Geneva meeting to block ratification of the European Defense Community. Frenchmen are wary of German rearmament—especially while their army is partly tied down in Viet Nam.

Peking means to build its prestige, try to force itself into the United Nations. The Chinese may feel, too, that a truce in Indo-China will redound to their benefit, and the Red virus will seep throughout Southeast Asia (BW—Feb. 20 '54, p146).

The Soviet and Chinese goals at Geneva, by and large, are different. Molotov and his Chinese counterpart, Chou En-lai, may have difficulty synchronizing their tactics. This may be an opportunity for Western diplomacy.

Dickering over Indo-China may last for months—even years—just as the Korean truce talks did. It may be interrupted, as Korean negotiations were, by large-scale military operations. Throughout, the free world will have to keep its nerve.

You can be sure that the U.S. is dead set against putting its own troops into the Indo-China battle.

But at the same time, we have resolved not to let Indo-China go down the Communist drain. The alternative to a truce may well be an undeclared war with China—even blockade and bombing.

This is the calculated risk of our Far East policy.

# INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

FEB. 27, 1954

Washington is set to take another calculated risk in South Asia.

Within a matter of days, the Administration will make up its mind on sending military aid to Pakistan. Despite India's bitter protest, the aid will almost certainly go through.

Pakistan's formal request for aid helped force our hand. A majority of U. S. officials feel that backing down now would give added prestige to Prime Minister Nehru's brand of fence-sitting.

There's no question but that the Pakistan program will badly foul our relations with India. Our encouragement of a security pact linking Turkey—a NATO member—and the Pakistanis adds fuel to the fire.

There are some warnings from London on our role in Asia.

Britons have long regarded U. S. entry into the area, one of the crucial power spheres of the Commonwealth, as inevitable and necessary. But there's anxiety in Whitehall whether the U. S. is flexible enough to walk the tightrope between success and disaster.

The effect of U. S. policy on India will be tremendous. Maybe a way will have to be found to appease Nehru.

There's an economic as well as a political slant regarding India. India may decide in its pique to put more of its meager resources into its army. Only way to finance it would be to use funds earmarked for economic development. Many experts believe this development to be the sole chance of avoiding famine and chaos in India.

—•—

The first of some £16-million in orders that British business brought home from Moscow (BW—Feb. 20 '54, p. 27) has been approved by the government. It's for £6-million worth of trawlers.

Meanwhile, the government is searching its soul to square some of the other orders—for machine tools and the like—with Western rules against strategic shipments to Moscow. Business pressure for a liberal interpretation of the rules is growing.

Whatever way the decision falls, the Soviets can congratulate themselves for having put the strategic embargo to its sternest tests.

With all the glowing talk from Moscow and London note this less publicized aspect of the Soviet trade offensive.

An eager French delegation made the trek to Moscow, too—and ran into snubs and excuses from Soviet buyers. It's likely that the firm French stand at Berlin is responsible for the Soviet attitude.

Politics, as much as economics, colors Communist trade overtures. Kremlin shoppers can turn off the hail-fellow-well-met overnight.

—•—

A decision seems at hand in the seesaw battle over the Export-Import Bank. At the Caracas meeting of the Inter-American states next week, Secretary of State John Foster Dulles is expected to announce that the Bank will once again make loans for economic development.

That will please capital-hungry Latin Americans. They've been bitter over the Treasury Dept.'s hold-down on Ex-Im development lending.

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# BUSINESS ABROAD



## Kremlin Trio Splitting

The triumvirate above rules Russia. But it shows signs of cracking up. Premier Georgi Malenkov (left) still is top man, but there's evidence that Foreign Minister Vyacheslav Molotov (center) and Communist Party Boss Nikita Khrushchev (right) are ganging up against him—as the three once ganged up to oust the late police head, Lavrenti Beria.

So far, the split hasn't modified foreign policy—and Molotov was able to

put a bold face on things at Berlin (page 31)—but it's going deep on the domestic front.

• **Policy Cleavage**—Malenkov's top spot in the collective leadership is the goal of both Khrushchev and Molotov in the new split. The growing factional struggle touches every aspect of Soviet policy, not only the "new course" in agricultural and consumer goods, but foreign policy as well. Malenkov stands for a moderate policy in domestic,

satellite, and foreign affairs, while the Khrushchev-Molotov combination is steering toward a tough policy both at home and abroad. The two factions are taking a common line now on foreign policy. Someday, though, this unity is bound to crack.

At the moment, the strength of the two factions seems to be about equal. Malenkov has the support of the government bureaucracy and the bosses of Soviet industry, and probably of Marshal Zhukov and the professional marshals (BW—Jan. 16 '54, p136). Behind Khrushchev and Molotov are most of the Communist Party machine and probably the political marshals like Vassilievsky and Bulganin.

• **Fundamental**—There's one big difference between this struggle and the one against Beria. The sheer weight of Beria's police organization threatened to destroy the precarious political balance set up at top Kremlin levels immediately after Stalin's death, and to lead to one-man rule. That's why Beria had to be eliminated. This time, the differences go further than the mere power balance at the top. They involve the whole range of economic and social problems that have arisen in the Soviet Union since Stalin's tight hold was removed.

So far Molotov has had his way on foreign policy—and he may continue to have it for a while longer. But Russia's basic economic problems, especially lagging agricultural output, are not being solved. On all big domestic issues there are conflicting policies, or complete indecision reigns. If this situation lasts much longer the results are sure to be reflected in Soviet foreign policy.

• **How It Started**—The purge of Beria and his chief henchman was hardly over before the new factional struggle started. It probably began last November, when Vassili Adrianov, secretary of the Communist Party in the Leningrad district, was demoted. Soon afterward came the demotion of Ignatiev, secretary of the local party organization of Leningrad. Both these men had been close associates of Malenkov. Since then there has been a rapid turnover of party leadership in the provinces—the most rapid since the great purge of the '30s. Party secretariats in the Ukraine, Armenia, Azerbaijan, Soviet Kazakhstan, Moldavia, and Lithuania have already gone down in the new purge. There's every indication that this is only a beginning.

There's no way of telling for sure to which faction the newly appointed provincial secretaries belong. At the moment it looks as if Khrushchev has the bulk of them in European Russia, ex-

cept for Moscow. Malenkov's friends seem to control the rest of the Soviet Union. The same kind of fight is under way for control of the satellites, but it's hard to tell just yet who's winning where.

• **Agriculture**—In Moscow itself the fight now centers around the Ministry of Agriculture, which has been reorganized several times within the last year. Right now A. Benediktov heads this ministry. He is a Malenkov man and a known enemy of Khrushchev. Khrushchev's party secretariat is attacking Benediktov publicly—through the pages of Pravda, the Communist Party newspaper.

Control over agricultural policy is at stake in this fight—with the peasants in the middle. By the end of November it was already clear that the original Malenkov-Khrushchev emergency agricultural scheme would not work. The Soviet peasant just didn't respond to the incentives of that summer emergency program (BW—Sep. 26 '53, p31), designed to boost output of meat and fats. Despite the drive, production of meat and fats continued to drop; and that went for other food products as well. Output of sugar beets and milk, both slated for increases of 25% or more, rose hardly at all.

The program failed because it had been based upon two contradictory elements: (1) new incentives for the individual peasants to work their private plots—such as lower taxes, smaller compulsory deliveries to the state; (2) harsher penalties on these same peasants when they didn't work their full time on the collective farms—part of the state and party pressure to jack up output on the state and collective farms.

• **Conflict**—Today the conflict inherent in these two policies shows up in the opposing stands of the state and party organizations. The party is stressing tighter control over the collectives. The government bureaucracy continues to emphasize the need for giving the individual peasant more incentive to produce.

The party view is so strong it looks as if party boss Khrushchev wants to forget the incentive program entirely and solve the present meat and fat shortage by additional investments in machinery and more supervisory personnel on state farms. In a sense, Khrushchev seems to want a return to Stalin's agricultural policy.

As a result of this conflict, Moscow is in danger of losing control over some parts of the agricultural economy. In Soviet Kazakhstan, one of the most important meat regions of

the U.S.S.R., things got so bad recently that Moscow had to send some top brass to the area—a member of the presidium and an MVD general, who is attached to the Red Army.

Obviously, this schizophrenic farm policy can't go on much longer. Sooner or later the Kremlin must decide whether to increase incentives to the individual peasant, or return to Stalin's harsh methods.

• **Grain**—The problem is different in the case of grain. Not that output isn't lagging here, too. Malenkov admitted in January that per capita grain production in Russia hasn't risen at all for five consecutive years. But in this case Moscow has apparently been able to agree—on a shift from last summer's plan, which aimed at an increase of yield per acre, to a new one with a target of bringing 20-million acres of new land into cultivation.

It's hard to see how this can work, either. The planned expansion is in the region of the Volga-Urals-Kazakhstan, an area where soils are of a strictly marginal quality. When a similar program was attempted in 1936 in this area it had to be abandoned because of the low yield. So it looks as if this is another emergency measure pulled out of somebody's hat—one that won't produce much in the way of results.

• **Consumers**—Confusion and indecision seem to be equally widespread in the field of industrial investments. Soon after Stalin died, Malenkov promised the Soviet consumer a better break. But there was no evidence during 1953 of any real change in investment policy to favor light as against heavy industry. The new regime operated primarily with stopgap measures in the effort to satisfy Russian consumers. It gave the consumer greater purchasing power by lowering retail prices, reducing the burden of compulsory state loans, and cutting taxation on the farms. As a result Soviet retail sales increased by 21%.

But production didn't increase by anything like this amount. In fact Moscow only claimed a 12% rise for the second half of 1953—and admitted that most of this came in such luxury products as washing machines, vacuum cleaners, and TV sets—items that only the Soviet bureaucracy can afford to buy. Increases of 3% and 4% were claimed for textiles and shoes, but it's doubtful if these were more than statistical gimmicks.

It seems clear that the Malenkov regime must have met the increase in consumer purchasing power by bigger imports of consumer goods from the

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satellites, and by drawing on state stocks. Probably some army stocks were thrown in once the truce was signed in Korea.

• **Dilemma**—It's clear enough, too, that Moscow will not be able to fulfill its promises of more food and consumer goods until it decides to divert substantial resources from heavy industry into agriculture and light industry. But this is a decision that the Kremlin finds hard to make. One reason: It has already decided to push atomic development to the limit, thus closing the atomic gap that now exists between the Soviet Union and the United States.

There's good evidence that the decision to push atomic power has been made. An important population shift shows up in the recent reallocation of Soviet electoral districts. The population of the Angara river district (east of Lake Baikal) has had a sudden jump of 600,000. Other large increases are shown in the Volga region. Both these areas are centers of Soviet atomic production.

Apparently the Kremlin has decided to reduce output of traditional armaments in favor of atomic weapons and long-range bombers. This is exactly what both the U.S. and Britain have decided to do in recent months.

• **Malenkov's Problem**—If this happens, Moscow will be hard pressed to find the resources for any sizable increase in investment for agriculture and light industry. And if the Malenkov government can't meet its promises for more food and consumer goods, it will have to reimpose the same kind of tight control on Soviet society Stalin always used. To enforce the shift, massed terror and purges will become inevitable. This would probably mean the end of Malenkov, who now stands more than anyone else for the "new course," which promised a better life to everyone.

Thus it looks as if Malenkov and his faction will have to press gradually for a change in investment policy, even if this means the atomic gap isn't closed quite so fast as Molotov and Khrushchev might like.

The Pictures—Bill Clinkscales—66; Joern Gerds—106, 107, 108, 109; Harris & Ewing—142 (top lt.); I.N.P.—31, 79 (top), 142 (top rt.); Bob Isear—Cover, 72, 78, 79 (bot.); Herb Kratovil—72; Archie Lieberman—59; Sovfoto—134; U.P.—26 (top), 32 (top), 136, 142 (top ctr.), 146; W.W.—26 (bot.), 154.

## BUSINESS ABROAD BRIEFS



These drilling bits are being used by a Gulf Oil Co. subsidiary in an expanding search for oil in Ragusa, Sicily. So far, oil hasn't been found in commercial quantities; initial tests have encouraged Gulf enough to continue the search.

• **Look south:** Directors of British-American Oil Co., Ltd., came to Dallas for a meeting—the first in the U.S. for the Toronto firm. Through a Dallas subsidiary, British-American Oil Producing Co., the Canadians plan a "substantial" increase in U.S. exploration and development—perhaps some 125 wells in Texas and the Rocky Mountain states.

• **Peru** received \$30-million credit from the U.S. Treasury, International Monetary Fund, and the Chase National Bank to prop up its weakening currency. The Peruvian sol has been depreciating under the impact of high dollar imports, tumbling from 16 to a dollar last year to 22 in January. The agreement is the first monetary stabilization deal made since the Randall Commission recommended that the U.S. and IMF use their funds to bolster foreign currencies that are made convertible without restrictions (BW—Jan. 30 '54, p118).

• **A list of U.S. companies with overseas investments**—some 1,200 companies with investments totaling over \$16-billion—has been compiled by Overseas Business Services, a unit of McGraw-Hill International Corp. The list will be available at \$20 next month.

• **Australia's budding oil industry** (BW—Dec. 12 '53, p155) is expected to order a minimum of \$10-million worth of drilling equipment in the U.S. this year.

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# Does Argentina Really M

- Peron's mellow attitude toward foreign industry is raising all sorts of speculation in the U.S.
- It may mean that the time is ripe to venture investment capital in the country.
- But the situation is still loaded with risks for investors and traders.

Argentina is a rich land—and today American business is again looking hopefully to the pampas and the River Plate.

Though it's one of the great trading nations and one of the richest markets in Latin America, Argentina has been all but kissed off by American businessmen since dictator Juan Peron's totalitarianism reached its peak.

Now there's a feeling of change: Businessmen believe Argentina may again have an important place in their foreign investment and trading future. Buenos Aires last week was buzzing with talk—so far unsubstantiated—of a vast oil investment by a group of U.S. companies. And in the U.S., government agencies, banks, and business houses report a flood of inquiries from Americans anxious to do business in Argentina.

• **Second Thoughts**—Much of the interest stems from changes in Peron's attitude. He has stopped calling Americans dirty names and instead speaks of his "unalterable friendship with the United States."

He is expected to give more hints on future U.S.-Argentine relations at next week's Inter-American conference at Caracas, Venezuela. Peron is expected to take a line of "hemisphere economic unity," urging lower U.S. tariffs, higher and more stable prices for Latin American goods. He's likely to talk about the U.S. guaranteeing private capital invested abroad—a move that would backstop Argentina's own bid for investment.

• **New Hope**—All this has revived hopes in U.S. investors and traders—and a certain wistful wishing for a return to the golden days before "Johnny Sunday," as old Argentina hands call Peron, took over. But the golden days can't return. Peron sparked an economic revolution that cannot be undone; Argentina has several long-term economic problems.

Still, for the first time in years, there's frank talk about Argentina's problems. And there are encouraging signs that Peron is backing away from some of the more ruinous policies of "Peronismo." His new, highly public-

ized investment law is again inviting foreign capital to Argentina.

## I. Economic Plight

Three generations ago, the Argentine appealed mightily to foreign capital. Freewheeling economic policies attracted European—mainly British—and U.S. capital in big chunks; immigrants followed the investment stream and built up one of the most skilled and literate populations in the Americas. The great British-owned railroads opened up the pampas, the meatpacking plants arrived, traders fed half the world with Argentine beef and wheat, and Argentines provided a lush market for manufactured goods. As late as 1940, there was about \$2.3-billion in outside investment in the country—some 60% British, perhaps 20% U.S.

Argentina earned tremendous profits during World War II and immediately after—and spent them hand over fist. Peron bought up many of the foreign-owned properties with his fat reserves. His bent toward state socialism pushed government intervention deeper and deeper into business. Foreign investment dwindled to one-third the 1940 figure.

In 1952, Argentina ran into its most serious economic crisis—a crisis that would have smashed a less resilient land. Two years of parching drought, coming as it did after several years of Peronist forced-draft industrialization at the expense of the farms, combined to wipe out wheat and meat exports, opened a yawning trade deficit.

Relief came quickly. Peron backtracked, gave the farmers a better break. Ideal weather produced a bumper crop, and heavy wool sales sent 1953 exports skyrocketing. Reserves of gold and foreign exchange almost tripled, and there was a healthy trade profit.

• **The Cost**—This favorable position was achieved only by a Spartan slash in imports—even below the austerity level of 1952. This year's exports will be down some, and Peron has admitted that the belt can be tightened no more. Argentina will have to import more, and it will have to dig into re-



# Mean It?

serves—or promote loans or investment—to finance what it needs.

This economic plight has resulted in a pack of new barter trade deals (some with the Soviet bloc), the new investment law, a diplomatic honeymoon with Washington, and a current Buenos Aires jest. Recalling that Peron had sworn to cut off his arms before accepting a U.S. loan, the wags call him "Venus de Milton," since financial aid was clearly what Peron had in mind when Milton Eisenhower came to call last July.

All in all, some informed U.S. observers believe that Peron is mellowing. He seems prepared to meet businessmen a little closer to halfway. On the other hand, it's worth noting that Peron hasn't give up his dream of leading a Latin American economic bloc, with strong anti-Yankee overtones. Also, his philosophy of a "third position—between the equally despised imperialisms of communism and capitalism" doesn't inspire confidence. Last week's announcement of a law establishing powerful employer groups whose agreements with labor will be binding on every businessman in the nation looks more like a leaf from Mussolini's book than development of the middle way.

## II. Assets and Deficits

The new Argentine investment law, as it stands now, needs a lot of clarification. Nor is it liberal enough to lure a parade of investment; it allows remittance of 8% of registered capital annually, after two years have elapsed. But many think the law is a step in the right direction.

Preferred investments are in the fields linked to Argentina's second Five-Year Plan—steelmaking, mining, chemicals, metalworking, power, and so on. But precious little new money has arrived. The new arrangements that have been made resemble that of Standard Railway Equipment Mfg. Co., Chicago. Standard isn't investing any hard money, but rather has a technical assistance agreement with local investors.

There's a flurry of interest in vehicle and farm machinery manufacturing. Germany's Daimler-Benz, Italy's Fiat, Britain's David Brown & Sons are exploring the ground along with several U.S. tractor manufacturers; Willys-Overland Export Co. is considering an assembly operation. Few of these involve important investment beyond some machines and imported parts, plus technical assistance.

Oil is the hottest topic in Buenos Aires—and the potential is promising. Some Texans have been sniffing around,

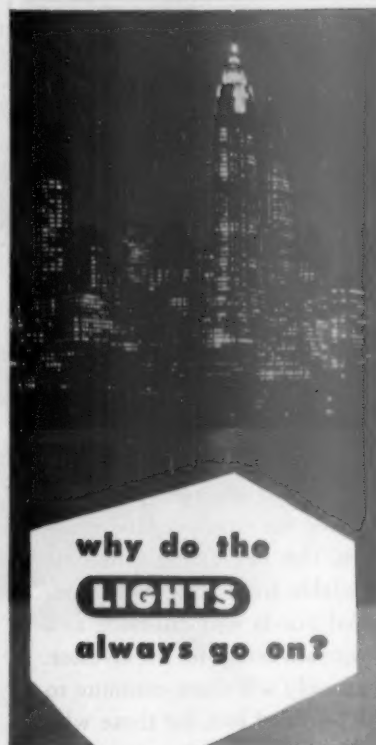
and it's no secret that Standard Oil Co. (N. J.), which has a small producing affiliate in Argentina, would like to put money into new development. However, the Argentine oil industry is under the thumb of a government monopoly, and so far no outsider has been able to pry an attractive offer out of the government.

• **Frozen Assets**—A big roadblock to new investment is that the laws presently do nothing for old investment—new money is leery of going where existing capital is less favorably treated. Pending new regulations, promised this spring, much of the \$400-million worth of U.S. investment in the nation is standing idle, with perhaps \$100-million in profits frozen in pesos. Big plants—Ford, General Motors, International Harvester—are almost wholly shut down for want of imported parts. Most U.S. companies intend to "keep the flag flying" in Argentina in hopes of better days, but more than one has considered trying to pull out.

The economics of any Argentine operation is another question mark. Peron's theory of self-sufficiency is that any cost is justified if an item is manufactured in Argentina. There will be no tractor imports, then, once local manufacture starts, and hang the cost. But outsiders wonder what will happen if Peron, or a successor, decides not to honor commitments made to some outfit that has painfully forced-fed local manufacture. Wouldn't a plant built to produce tractors at 80,000 pesos be pushed to the wall by a more conventional policy that imported them, say, at 20,000 pesos?

• **Dollar Problem**—There are other considerations. Even with a favorable political and economic climate within Argentina, it may be hard for the country to earn dollars needed to service investments and finance increasing trade. Argentina's dollar earning potential is not overly strong: We do not buy its wheat or meat, and only in time of unusual U.S. wool purchases does Argentina pile up surplus dollars. Nor can it find dollars elsewhere without free-flowing multilateral world trade—some return to the old days when Argentina earned dollars in trade with third countries.

• **The Score**—It would be a mistake to underrate Argentina's potential—and the opportunities there for U.S. business. For the time, however, everything depends on world trade trends, harvests, and—of course—Argentina's government. One imponderable in the situation is Juan Peron's health. Despite constant rumors that he is suffering some dread disease, observers believe he is vigorous and as firmly in the saddle as ever, still apparently addicted to economic nationalism, inflation, and a fuzzy kind of fascism as his prime policies.



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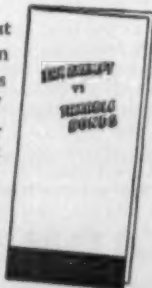
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## THE MARKETS



## The Bears Wake Up

Prices on the stock market are wilting. As the chart shows, shares have been falling since Feb. 5. The little downward fillip at the extreme right-hand edge of the chart extended into a full-fledged line this week; and by midweek the Standard & Poor's index of 50 industrial stocks stood at 258.1—a good five points lower than the February peak.

The drop hasn't been too severe to date. In the cases of some shares, it merely took a thin layer off the highest peaks seen in 20 years or longer. But for stocks as a group, the decline has canceled out better than a month's cumulative gains. S&P's index of 50 industrials by midweek was at the lowest level since Jan. 20.

Don't forget, however, that the market was fairly high before the February droop. Even after the retreat, the S&P's industrials index stands only 4.4% below the bull market peak of 270.1 recorded in January, 1953, when Wall Street enthusiasm over President Eisenhower's election was at its zenith.

• **Why**—The Street has plenty of plausible reasons to offer for the February decline:

• For one thing, many Wall Streeters have been bears ever since last year, when they concluded that industrial activity was due to drop sooner or later from its high postwar levels.

• For another, the short interest

on the New York Stock Exchange is at the highest level in 22 years (page 120); this indicates a substantial chunk of money in the hands of investors who feel the market is due to go lower.

• In addition, many in the Street point out, you can't get around the fact that the business outlook is still hazy. The Administration's promise to consider increasing income tax exemption allowances won't hold much market cheer if unemployment rises again next month.

• **Exempt**—Not all stocks have taken part in the February drop. Still holding their January gains—and in some cases widening them—are Bethlehem Steel, B. F. Goodrich, Standard Oil (N.J.), Gulf Oil, Texas Co., Kennecott Copper, General Electric, Westinghouse, International Paper, Radio Corp., Motorola, and some of the aircrafts. Among the railroads are Atchafalaya, Topeka; Southern; Southern Pacific; Illinois Central; Northern Pacific; New York Central.

The shares in greatest demand today, says one market analyst, are those of companies with the least doubt that their earnings will hold up in the period just ahead.

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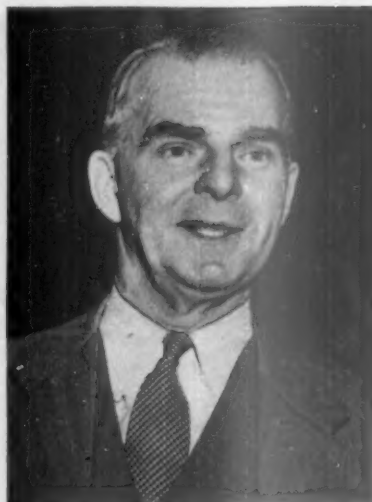
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# LABOR



Rep. Bender: Racketeering    Rep. McConnell: Welfare Funds    Sen. Butler: Reds in Unions

## They Put Searchlight on Unions

Three congressional probes start digging into activities of unions suspected of graft in operations or Red influence; aim is more effective legislation.

Congress turned its investigating eye toward labor unions last week for a closer look at practices it has been firing on at long range.

In rapid succession, three teams of congressional probes held groundbreaking ceremonies to start formal digging into activities of suspected unions. When the dust clears and the facts are in, the legislators expect to have exposed and passed legislation to handle:

- Communist influence in labor unions, and in defense plants.
- Reported corruption in multi-million-dollar union health, welfare, and pension plans.
- Racketeering and graft in union operations.

• **Union View**—Union officials take a jaundiced view of these concerted activities on Capitol Hill. It is not so much that they want to hide out from the searchers, but they complain that under the political magnifying glass, any fire will appear to be a lot bigger than it really is. They can point also to already successful or currently active attempts to put out the fires themselves.

On top of that, they claim that the leaders in the investigations are congressmen who are far from the most sympathetic to the union cause.

The investigating committees retort that these are not antiunion moves.

They say they are acting on evidence disclosed in previous probes, or on current complaints of union members.

Certainly some corruption, communism, and racketeering will be disclosed. The question is: How extensive will it be?

• **Probing for Graft**—The widest-ranging investigation is being planned by the House operations subcommittee, headed by Ohio Republican George H. Bender. This group—which last week has handed \$100,000 to start work—has the jurisdiction of the old Kefauver investigating committee: that is, gangsterism. But this team is limited to the labor movement in seeking out corruption.

The committee doesn't figure to be frustrated by this restriction. As a staff member put it: "We have fairly well defined ideas where and whom we are going after." The Bender group plans to take up where last summer's joint investigation (by the House operations and labor committees) left off—at Kansas City and Detroit.

In those cities the earlier probe uncovered extortion pay-offs to union officials distributing pinball machines, juke boxes and the like; a tie-up between labor leaders and race track operations; jurisdictional battles between AFL giants and the Teamsters—which

the committee said had "literally reached the armed camp stage. . . ."

With this background, the new investigation will move first into those areas already broken open. The committee plans to do a lot of traveling after that.

• **Welfare Funds**—While this is going on, another House group—the Committee on Education and Labor—will be looking into health and welfare programs, at the request of President Eisenhower. The President's Taft-Hartley program urges Congress to examine welfare plans "with a view to enacting such legislation as will protect and conserve these funds for the millions of working men and women who are the beneficiaries."

Committee head Samuel K. McConnell, Jr., of Pennsylvania will lead the probe into giant funds of such unions as the Teamsters, United Mine Workers, construction unions, the CIO steel and auto workers. A staff member says this doesn't mean all these funds are suspect.

The Teamsters—already charged in the earlier investigations with "siphoning off . . . enormous funds" from welfare programs to benefit favored union officials and their families—are due for the closest scrutiny.

• **Housecleaning**—But the 1.3-million member union is not just waiting for the knife to fall. President Dave Beck told his executive board in Miami last week that the parent union wanted to investigate all welfare programs of its locals. He has invited Congress to take

a look into the teamster programs, with a promise to cooperate. The entire AFL, in turn, came out recently with a plea to all affiliates to set up uniform rules to govern these funds.

This is not just altruism on the part of labor leaders. They hope—by making their own rules and cleaning their house—to ward off any tight legal restrictions on these funds. Altogether, some 10-million union members are now covered by welfare funds, required under Taft-Hartley to be under joint union-management operation, but in fact more frequently handled by the unions.

• **Reds**—The third investigating phase falls to a task force of the Senate Internal Security Subcommittee, which

last week began open hearings on communism in unions. Running the show is Sen. John Marshall Butler of Maryland, who called the hearings to consider three bills that would tightly restrict Red-led unions. Among the witnesses were representatives of the left-wing United Electrical Workers (Ind.), and of General Electric Co., where UE does some of its bargaining.

The emphasis, however, is not on exposure of Communist union officials. It is on working out new legislation that could effectively prevent Reds from infiltrating into unions, and prevent unions controlled by them from continuing as representatives of the workers. The present Taft-Hartley restriction of Reds has proved ineffective.

## One Big Union in Oil Industry

**It's still just a shadow, but 31 groups have hammered out a probably acceptable compromise.**

A new Oil & Chemical Workers International Union made a shadow appearance in Philadelphia last week-end after a four-day convention of 31 oil unions, mostly independents. So far, it has no members, no headquarters, and no money. But it could hardly attract more attention—or cause more worry—if it were already full-bodied and tough-sinewed.

Unions claiming 212,440 members met under heavy secrecy wraps to achieve a long-time objective: one big union covering all workers in oil and allied industries. They hammered out a constitution, with a lot of concessions in it for independents afraid of a possible loss of autonomy, and made arrangements for submitting it to all oil independents for ratification before mid-June.

Shortly after that, probably August, a first constitutional convention of the new O&CWIU will be held in Cleveland. The new international will become a thing of substance, a union with a potential of well over a million members—including “marketing people at both the wholesale and retail levels.”

Delegates talked of a union with the eventual impact in oil and chemical industries that John L. Lewis' United Mine Workers has now in the coal industry.

• **Worries**—It is talk like this that really worries industry people. Their ideas of what it could mean take two lines:

• An industrywide bargaining threat is seen—and feared—by many em-

ployers. Up to now, oil companies have been able to deal with their unions on a local basis only; they've never had to worry about industrywide contracts or tough industrywide strikes.

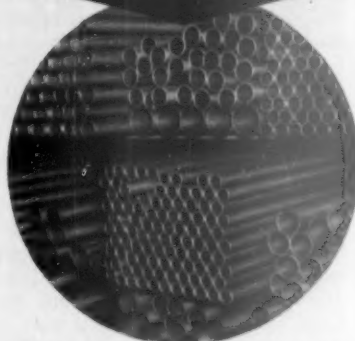
• **Organizing efforts** in present nonunion areas are expected by other employers, particularly in the Southwest, as soon as O&CWIU gets its feet firmly on the ground. They figure this means trouble for them—more immediate and concentrated trouble, they say, than an industrywide bargaining demand could bring in the fledgling year of a new oil union.

• **How Many**—The only real doubt seems to center on how many unions will be in the merger, and where the international will wind up—as an independent or as a CIO affiliate.

O. A. (Jack) Knight, president of the Oil Workers International Union (CIO), was the behind-scenes power in the Philadelphia convention, and is chairman of a committee set up to press for quick amalgamation of all unions. Knight would, of course, like to see the new union affiliate with CIO. At the present expected membership of 212,440, his OWIU (CIO) has more than enough voting power (about 70% of the total) to swing the O&CWIU course into CIO.

However, Knight and OWIU (CIO) aides reportedly made clear at Philadelphia that if a majority of the new international prefer to be independent, his organization will accede to their wishes by dropping its present ties to CIO.

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# Anticipating the Big Issue

Toledo industries have formed a council to educate employers in how to combat labor's demand for a guaranteed annual wage—1955's top bargaining issue.

Although the guaranteed annual wage isn't likely to become a major bargaining issue until next year (BW—Nov. 28 '53, p. 26), some employers aren't waiting for the starting gun. Industry in Toledo, Ohio, is already beginning to get ready for it.

The United Auto Workers (CIO) announced at its 1953 convention that the guaranteed annual wage (GAW) would be its No. 1 target in 1955, when auto industry contracts come up for renegotiation in Detroit.

Since Toledo's major industries are tied in with the fortunes of Detroit, what happens there is vital to Toledo. Willys Motors, Inc., Champion Spark Plug Co., Electric Auto-Lite Co., City Auto Stamping Co., Libbey-Owens-Ford Glass Co., De Vilbiss Co. are important Toledo employers.

One Toledo group, the Northwest Ohio Industrial Council, thinks it's not a bit too early to start planning for annual wage demands. NOIC, which is made up of 35 of Toledo's largest firms with more than 40,000 workers, hasn't turned thumbs down on GAW yet; but it realizes that it will take a lot of study and research if employers are going to demonstrate a thoughtful position on the GAW issue.

• **Aims**—David Molthrop, the NOIC's 38-year-old executive vice-president, has launched a program to educate employers and put them on the offensive in the GAW battle.

"When this annual wage issue gets to the bargaining table, we want it to come in on a high level—avoiding any mud-slinging or name-calling on either side," Molthrop says. "But to do this, employers are going to have to get their side of the story ready."

"We, as an employer's group, are not necessarily opposed to an annual wage per se. But when we sit down at the table, we want to be able to show the unions clearly what we are shooting for, as well as see clearly what they are shooting for."

• **Plans**—To get on the offensive, NOIC is now undertaking an intensive two-pronged program among Toledo firms.

First, it's compiling and tabulating complete past performance records on each plant, department by department. It is analyzing trends and fluctuations in production, employment, sales, purchases, unemployment compensation charges, personnel shifts, and plant-wide seniority categories.

These are the figures that will show

employers—most of them for the first time—what GAW would cost them in dollars and cents under certain proposals, and what factors must shape bargaining when the union slaps a GAW demand on the table.

More important than this, Molthrop says, "it translates the uniqueness of every individual firm into concrete figures. When the union starts to talk GAW, it will find that no two plants have the same past performance records."

The second step is to help each firm develop the best methods for stabilizing its own employment.

"If employers are going to counter the strong emotional appeal the GAW has for the average worker, they are going to have to come up with an answer to cyclical fluctuations in employment," Molthrop points out.

• **First Stage**—The answer, as far as he is concerned, is employment stabilization by methods long advocated by many national employer organizations. These include development of new products, off-season sales campaigns, production for inventory, deferring work on long-term orders for slack periods, stimulating consumer buying in slack seasons through promotion and advertising, and over-all coordination of the sales-production-employment departments of a company.

So far, NOIC is just in the preliminaries of its program. When it finishes the statistical part of its studies, it plans to move into each plant for consultations with top officials, department heads, and foremen on ways for stabilizing work.

After all the major plants in Toledo have been analyzed this way, NOIC hopes to form an employment stabilization committee from top management in the city. It will be the committee's job to work on improving the leveling of employment.

• **Case Study**—Already NOIC has results to show. It has completed a 16-week in-plant study of one major Toledo firm, and is nearing the end of two more studies.

The completed study points up how much there is to learn about GAW—how hard it may hit an employer and how tough it may be to arrive at a sound bargaining position.

Here are some of the estimated costs, based on the study of Plant X:

(1) With an average employment now of about 1,300, Plant X had a

high-low employment range of 316 in the 1946-1952 period—a pretty stable picture. Based on this high-low range, the company would have had to pay out \$1,323,400 a year to its unemployed workers if it had signed a GAW agreement calling for a full week's pay for every week of unemployment.

This hypothetical figure—which Molthrop admits is the extreme one—is based on an average hourly wage of \$1.87, a 40-hr. week and no overtime.

(2) Based on a plan that would call for GAW payments only to workers with a certain seniority, Plant X would have to guarantee these payments to its unemployed: If the seniority limit were set at five years, 67.9% of what the full wage guarantee would cost if every single laid-off worker got it; if three years, 73.9%; if one year, 80.6%; and if six months, 96%.

Even using a fixed seniority limitation, the costs from plant to plant could be miles apart. In a survey of 27 Toledo plants, Molthrop found that a wage guarantee, based on an arbitrary three-year seniority limit, would vary from 97.8% of a guarantee for everybody to 36.4%. Under this kind of a GAW plan, the old established firm with a high seniority level would be at a disadvantage compared with a newer firm with low seniority pattern.

(3) Based on the type of plan advanced by the United Steelworkers (CIO), which calls for company payment to a trust fund for unemployed workers of 10¢ for each hour worked by each employee, Plant X would have to pay in \$276,640 a year, based on present employment.

## How Fringe Benefits Rose in Massachusetts

Fringe benefits last year added nearly \$278.5-million to regular factory wages in Massachusetts, according to the research department of Associated Industries of Massachusetts, in Boston. AIM estimated the cost per hour to employers at 22.9¢.

The Associated Industries survey, statewide in Massachusetts, covered payments for vacations, holidays, leave with pay, group hospitalization, surgical plans, life insurance premiums, sick leave, and pension and bonus programs. It did not include premium-pay provision such as higher wages for night shifts, or the cost of employee benefits required under state or federal laws.

In 1949, a similar AIM survey put the cost of fringe benefits at \$200-million. A substantial part of the increased cost since then has been for pensions and cash sickness benefits. AIM reported a 59.6% rise in private sickness-benefits plans in the past five years.



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UNEMPLOYMENT RELIEF line got longer in Detroit as auto production was slowed. But UAW asked General Motors to cut out more low-seniority workers to save full-time earnings for higher-paid regulars. The question: Is outright layoff of some men . . .

## Better Than a Short Week?

Up to now, the auto union has always argued for spreading work among the many. Now it finds too many employees—not union members—on GM's payroll.

The United Auto Workers (CIO) last week protested four-day work weeks in General Motors' Chevrolet and Fisher Body plants. It urged "readjustments" in GM's work force to give regular employees full-time work.

At first look, this seemed to be a reversal of the traditional union policy that favors spreading the work among as many employees as possible in time of curtailed production. UAW quickly denied it was retreating from its former position. It said "other factors" are behind the union's stand in the GM case.

• **GM Hiring**—GM, almost alone in the auto industry, has been hiring steadily. It reports 30,000 more employees now than a year ago. Yet the Chevrolet division, GM's largest, has cut back output 20% and, like some other GM units, it is operating on a 32-hour week.

This situation exists because, UAW charges, "as ridiculous as it may sound at this time, GM is hoarding labor." According to the union, GM is hiring now, and keeping workers on the payroll by cutting the work week, simply because it wants to have a full work force when the expected Chevrolet vs. Ford production race starts this spring. The union argues that the corporation's gain, under the short-week policy, is "inconsequential as compared to the

loss of employee earnings and morale."

• **Key Point**—Moreover, UAW complains, "probationary" employees—newly hired and not yet union members—are getting just as much work as "regular" employees who carry UAW cards. New employees can't be required to join the union for 90 days.

The key to UAW's new attitude is this double irritation—GM's continued hiring while UAW members are "underemployed" in some plants, and the forced sharing of available work with not-yet-unionized probationers.

• **For the Record**—At the same time, UAW is using the occasion to go on the record:

• Supporting the fight by Walter Reuther, president of UAW and also of CIO, against the decline in consumers' purchasing power. The union says purchasing power would be bolstered if GM laid off probationary workers—and let them collect unemployment pay—and gave full-time employment to higher-paid seniority employees.

• For changes in unemployment compensation laws. UAW complains "too many manufacturers" shorten the work week instead of laying off workers, just so they can escape a higher jobless-pay levy. According to the union, workers employed part-time should get partial jobless pay for their underemployment.

• With another argument for a guaranteed wage, UAW's next big goal (page 144).

• **GM's Answer**—General Motors has no intention of following the union's suggestion—and UAW has no way to force the issue. Harry W. Anderson, GM's vice-president for personnel, has told the union at four conferences that if the company "adjusted" employment now, it would only have to hire workers back in April.

Moreover, Anderson said, GM employees nationally are averaging more than 40 hours a week.

UAW hasn't protested against short work weeks in other auto plants, such as Chrysler, Hudson, and Studebaker. The big difference is that those plants haven't been hiring.

## Drumming Up Support For Strike Vote Law

President Eisenhower's recommendation that the Taft-Hartley act be amended to provide for a secret strike vote got a determined advocate this week in Gen. Brechon B. Somervell, president of Koppers Co.

Somervell is returning to the world of public affairs after eight years of nose-to-grindstone attention to Koppers' problems. And he's telling his friends and "anybody who will listen to me" that what brought him back was a conviction that the strike ballot proposal is the most important domestic issue now before Congress. He says he is going to spend his time rallying business and public support.

Of all the President's T-H recommendations, the strike vote proposal has become the most controversial. In part this has developed through confusion over the President's intent. Two Republican members of the Senate Labor Committee have submitted bills for a strike ballot. One of these, by H. Alexander Smith of New Jersey, would provide for such a vote after the strike is on. The other, by William A. Purtell of Connecticut, would provide it before the strike begins. In the clash of opinion over just when the vote should be, the whole strike vote proposal may get left behind when Congress legislates on amendments.

Somervell is strongly in favor of the pre-strike vote. "I want a smallpox injection before I get the fever," he says. Somervell also favors leaving the question of whether there should be a vote at all up to the parties in a labor dispute. Thus, if contract negotiations deadlock, either the union or management could call for such a balloting. Under Somervell's plan, whichever party calls for a strike vote would have to bear the cost.



## Airliners Groomed for North-South Flights in Huge New Hangar at Miami

At Miami International Airport there's a remarkable new building. The winter vacationist passing through the airport may hardly notice it. But if he travels by Eastern Air Lines, that building has a large share in the success of his trip. It is Eastern's huge new maintenance hangar, and the men who operate it say it is the biggest and finest building of its kind anywhere.

The hangar measures nearly one-quarter mile from end to end, and has a skeleton built of 3,080 tons of Bethlehem steel. Construction schedules called for completion by the start of this year's

peak travel season. Bethlehem helped make this possible by quick fabrication of the steel at the Pottstown, Pa., works, and Bethlehem erection crews set up the steel at Miami in just seventy working days — an average of one hundred pieces of steel erected every day.

Any one of the fleet of 119 airliners that Eastern uses in flights out of Miami may be in the air as long as 4,000 hours a year, logging an annual total of perhaps 750,000 miles. The care these busy airliners receive on the ground, the rigid

system of checking, testing, overhauling they undergo, is as important as the way they're handled during flights.

This new hangar with its 10½ acres of floor space, its 14 work ports and its broad concrete ramps, is an important part of Eastern's major overhaul and maintenance base. The hangar is the center of the "preventive maintenance" work carried on by Eastern's 4,500-man engineering and maintenance force to keep the fleet in top condition for service to the traveling public.

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## Lewis Scores

**New contract with West  
Kentucky Coal opens a stub-  
born nonunion pocket, paves  
way for big drive.**

John L. Lewis' United Mine Workers has made a big stride toward clearing a major pocket of resistance to mine unionism in western Kentucky. Quietly and peacefully, it has negotiated its first contract with West Kentucky Coal Co., Inc., in Madisonville.

The agreement could have a big impact on the industry. It opens up the way for a concerted UMW drive against other nonunion operators in the area—one spot Lewis has been unable to penetrate in strength until now.

Even more significant, the contract reinforces Lewis' weakened bargaining position in the soft coal industry. If it is followed up by other settlements with nonunion mines that cluster about West Kentucky Coal, and take their policies from it, the agreement may bring a new round of coal bargaining a lot closer.

• **Contract Worries**—UMW contracts could have been reopened on wages and other issues six months ago (BW—Oct. 17 '53, p. 172). The union—which means Lewis—chose to sit tight. The big reason was the poor economic condition of the industry. But a lesser one contributed to UMW reluctance to enter into what obviously would turn out to be a rough bargaining round: Too much coal has been coming out of nonunion mines with lower costs, and selling for lower prices, in the most competitive coal market in years.

UMW felt that before it could go into contract negotiations it had to clear up some of the nonunion production areas—or at least make a good show of doing so.

• **Lucky Break**—West Kentucky Coal was an admirable starting point, and, as it happened, an easy one.

For most of UMW's 60 years, the union had been trying futilely to unionize the Madisonville mine. One attempt after another to sign up the company's more than 1,000 miners got nowhere.

Management stuck to a firm and well-publicized policy: Whatever UMW negotiated in the industry for union miners, West Kentucky Coal gave its nonunion employees, automatically and voluntarily. That even applied when UMW won its welfare-fund royalty and raised it gradually to a 40¢-a-ton figure.

Last year, a change in management brought a change in West Kentucky Coal policy toward unionism. Cyrus S. Eaton, Cleveland financier and long-

time friend of John L. Lewis, bought control of the Madisonville company, and became its board chairman. At the time, there was a story that Eaton moved in with money supplied by UMW's hefty treasury, but Eaton has denied this. In any event, it was only a few months after he took over that West Kentucky Coal agreed to discuss the possibility of a contract with UMW (BW—Nov. 21 '53, p. 180).

Real bargaining got under way in December, and had to deal mostly with the technical problems of converting West Kentucky Coal's wages and other work terms into the type found in standard UMW contracts. The agreement has now been approved and signed.

## LABOR BRIEFS

**Joint wage action** by the United Packinghouse Workers (CIO) and Amalgamated Meat Cutter & Butcher Workmen (AFL) didn't end after the rival unions teamed up to negotiate parallel contracts last year. In recent weeks, officers of the two unions met in Chicago to discuss possibility of reopening pacts on wages next month.

• **Contract demands** amounting, with fringes, to "a package of considerably more than 10¢ an hour" were placed before employers last week by AFL's Glass Bottle Blowers Assn. Lee Minton, head of the 47,000-member union, said its negotiators do not accept "this widely heralded gloom about business." The union says prospects in 58 plants under contract are "the best in history."

• **A surprise agreement** in Hawaii by the leftist International Longshoremen's & Warehousemen's Union and six stevedoring companies has settled island dock wages for two years. The longshoring contract boosts pay 5¢ now, 3¢ more on June 15, and 5¢ more on June 15, 1955, a total 13¢. There is no reopening until June 15, 1956. ILWU has also signed a two-year pact with pineapple companies, for a 4¢ raise this year, nothing next year (BW—Feb. 20 '54, p. 160). It is now negotiating with Hawaii's third big industry: sugar.

• **Merger of the International Brotherhood of Paper Makers and International Brotherhood of Pulp, Sulphite & Paper Mill Workers** (both AFL) is receiving serious consideration in both unions. The first group has 70,000 members in 380 locals, the latter has 141,575 in 585. The present goal is a single strong union in 1955.



**TUESDAY**



**THURSDAY**



**MONDAY**

## "Prefab" skyscraper clad in Alcoa Aluminum in 6½ days — owner to save thousands on upkeep

It used to take *months* to enclose a building in its thick masonry "skin". The Tishman Building, 99 Park Avenue, New York, took less than a week.

The completion of a building used to mark the beginning of costly maintenance—cleaning, painting, pointing. This building will require virtually no exterior maintenance.

Thick walls used to consume valuable interior space. This building has thousands of feet more space to rent.

The first plans of this \$14 million

structure were redrawn after careful study of our own Alcoa Building in Pittsburgh. Our pioneer use of aluminum curtain-wall construction forecast the economics realized by this walls-in-a-week record. The 1800 exterior panels were prefabricated, each with two windows, by General Bronze Corp., in three months. Two stories high, 4½ feet wide, they were trucked to the site, stored on the floors they were to enclose, installed from inside without exterior scaffolds.

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## How to Make Your Wampum Count

For the tobacconist of yesterday, the choice of advertising media was a simple one. The wooden Indian outside his door announced to passing prospects: "Cigars sold here."

Today, however, the selection of advertising media involves the active participation of many corporate executives. A study conducted in 1953 by the McGraw-Hill Research Department showed that nearly three executives—in addition to the advertising manager—participate in media decisions. The study also showed that two executives—in addition to the advertising manager—select specific media.

These facts confirm the judgement of leading media advertisers who, for the past 10 years, have placed more advertising pages in *Business Week* than in any other general-business or news magazine. These advertisers know that *Business Week* reaches more management men per advertising dollar than any other magazine in its field.

YOU ADVERTISE IN BUSINESS WEEK WHEN  
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**BUSINESS  
WEEK**



### Many corporate executives in addition to the advertising manager participate in media decisions

Tabulations below are based on a 1953 study among 2,525 executives in 609 major companies. Replies were received from 410 executives in 288 companies. The question asked was: "Who in your company, in addition to the advertising manager, participates in media decisions?" Copies of the complete report are available on request.

Title	Companies in Which Executives Participate
Board of Directors .....	12%
President .....	53%
Vice President .....	61%
Secretary-Treasurer .....	8%
General Manager .....	27%
Sales Manager .....	78%
Product or Regional Sales Manager .....	13%
Marketing Manager .....	8%

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# PERSONAL BUSINESS

BUSINESS WEEK

FEB. 27, 1954



Even if you can't get up all the cash you owe in time, be sure to file your income-tax return by Mar. 15.

That's a flat rule. It applies to everyone who made over \$600 last year—regardless of whether he's so broke now he can't pay a cent of tax.

What gets you in deepest trouble is not failure to pay on time, but failure to file a return. The government knows that there are often sound reasons—unexpected heavy expenses, for example—for delaying full payment. But the lack of a return in its files could have the criminal overtones of willful tax evasion.

Just how seriously the government regards this can be found in the relative penalties for not filing and not paying:

- **Failure to file:** If the delay is not more than 30 days, the penalty is 5% of the tax. For each additional 30 days or fraction thereof, another 5% is added, until the total penalty reaches 25% of the tax.

- **Failure to pay:** This carries an interest charge of 6% a year—nothing more. (Willful failure to pay, of course, can be punished as a misdemeanor.)

Note that failure to pay on time will still cost you extra money. And 6% interest is high. If it's inconvenient to take ready cash, the best bet is to borrow money at a lower interest rate, pay your taxes when due.

Don't make the mistake of thinking you can get away without paying at all, or that you can arrange your own terms completely at will. If you try it, here's what happens:

Several weeks after you have filed your return, you'll get a Notice & Demand (Form 17). This gives you 10 days to make payment. If you ignore it, the District Director sends you a second Notice & Demand (Form 21). This gives you 15 more days to pay up.

Ignore this, and your case will go to a field staff for collection. The staff will contact you on the telephone, and by mailing you a warrant letter. If you don't pay or submit a part-payment plan within 20 days of the mailing of the letter, a field collection officer will go to your home or place of business for one more try.

Failure to pay at this late stage will probably lead to seizure and sale of your property.

If you can prove undue hardship, the government will go along with a part-payment. But it won't buy that if it's purely for your own convenience.

Here are some mechanical points to bear in mind:

Don't forget to sign your return. If it is a joint return, both you and your wife must sign. You do not have to sign before a notary. But remember that the return is signed under a declaration of perjury penalties.

If your wife died during the year, you don't lose the right to file a joint return. The return should have both names—yours and your wife's.

If there is an executor or administrator, you sign with him; if there is none, the return is signed by you alone.

If you are also the executor or administrator, sign both as an individual and again in the official capacity of administrator or executor.

# PERSONAL BUSINESS (Continued)

**BUSINESS WEEK**

**FEB. 27, 1954**

**Remember, you must report the sale of your personal residence at a gain. If you do not intend to buy or build a new one, be sure to tell your accountant. He will report the gain on Schedule D and attach it to your Form 1040.**

If you bought and occupied your new home within one year before or after the sale (18 months after if you build), there is no taxed gain—unless you pay less for the new home than you got for the old one. However, you must write "none" in column 8 of Schedule D. Also, attach a statement showing the date you bought the residence, the purchase price, and the date you moved in.

**Don't let lack of room on the return keep you from giving your accountant all your tax transactions. He will submit the detailed list with the return.**

—•—  
A decision by the Appellate Court in New York last week points out the importance of avoiding writing conditions into your will whenever possible. Doing so can lead to litigation and expense for the estate—and your beneficiaries.

In this case the condition was set down by the heir's great-grandfather—that any descendant who married outside the Jewish faith would forfeit his legacy. A great-granddaughter planned such a marriage.

The court decided, 3-2, that she could go through with the marriage and still get her inheritance. The reasoning was that she was not a direct heir but an appointee under the will of her father.

But generally speaking, conditions in wills are enforceable. The rule is that if a person accepts a benefit under a will he must conform to its other provisions.

Note that this does not apply to conditions contrary to public policy. Among these are those encouraging violation of one's duty to his family—such as requiring a father not to support his child, or requiring a beneficiary to separate from his wife in order to receive a gift.

(However, courts normally uphold the condition that a wife is to receive income while she remains a widow. The ground would be that this condition is designed to provide support rather than to prohibit marriage.)

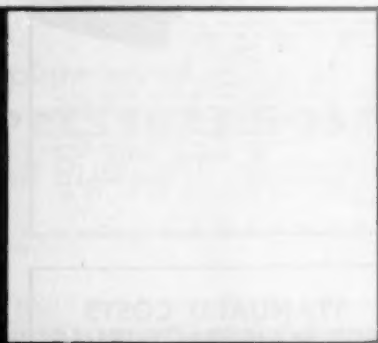
—•—  
For 75¢ you can get at the newsstands a book called *Golf After Forty*, just published by Popular Mechanics Press. Written by Dr. H. A. Hattstrom, it claims to show you how to keep your game good and crisp, regardless of middle-age spread.

Main point is that loss of suppleness and coordination causes errors in swing. Hattstrom claims this can be overcome by the "flatfoot manner"—keeping the left foot firmly on the ground throughout the swing. Your drives won't go 300 yd., but they will be "controlled tee shots, right down the middle."

—•—  
A new drug for treating Parkinson's disease (shaking palsy) is now available in the U.S. Called Parsidol, it is put out by Warner-Chilcott Laboratories. Tests have shown Parsidol to be effective in 87% of the cases, relieving all symptoms, and particularly rigidity.



**Where will you see**



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**A**T THE BALL PARK, maybe . . . in a tough little cap that defies bean balls. Or in a bakery truck . . . as lightweight, easily-stacked trays that speed loading and take only a fraction of the room needed for old-fashioned boxes.

No idea is too big, no product too small, for reinforced plastics made with BAKELITE Polyester Resins and glass fibers. A machinery manufacturer uses them for a durable, protective carrying case shaped to fit demonstrators' models of his product. Another makes 4½ in. O.D. pipe in 20-foot lengths that a man can lift alone.

The Army has a reinforced plastic sled, molded in one piece, that carries 200-pound loads over Arctic terrain. And new plastic-bodied sports cars are alerting everybody to the styling possibilities in these materials.

Reinforced plastics are *structural* plastics. Architects use them indoors and out because of their mechanical strength, color and decorative effects. Reinforced plas-

tics are molded with very low pressures, and can be formed into a variety of shapes to fit many different requirements.

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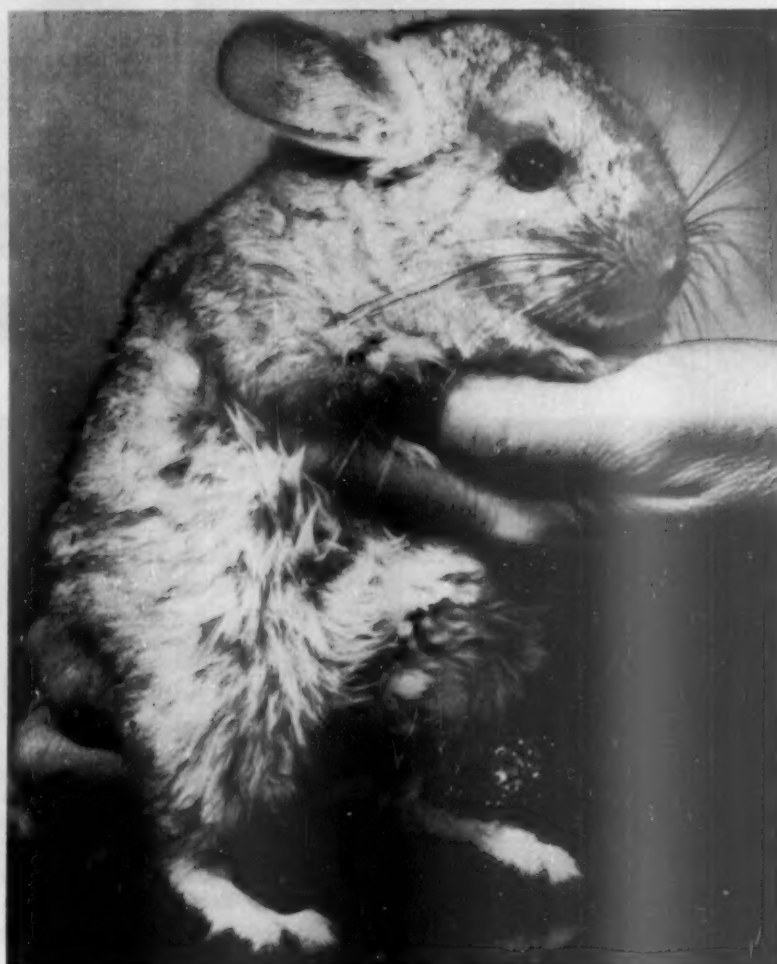
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## He's a Commodity Now

The chinchilla industry has been biding its time while the slow-to-produce animals built up a backlog. Now there are enough pelts on hand to invade the market.

This month the chinchilla industry is preparing to transfer from the maternity ward to the marketplace.

The move is no sudden action. For 36 years, chinchilla breeders have been trying to persuade the small South American rodents to breed at high speed, so the industry could get enough pelts to crash the luxury-fur market.

The chinchillas refused to be rushed, and so the breeders have made a living by selling each other mated pairs of the little animals. Now the pelt stockpile finally has reached what looks like a practical level for a commercial fur. This spring, probably in June, somewhere between 10,000 and 20,000 pelts will go on the auction block.

The switch from breeding to marketing is being directed by the National Chinchilla Breeders of America and its companion organization, the Farmers Chinchilla Cooperative of America—both headquartered in Salt Lake City. NCBA was organized in 1937, when it looked as though the industry was nearly ready to go places. The cooperative was organized in 1950, to market the pelts.

NCBA has another card up its sleeve. It hopes to promote the breeding business into big-time stuff. At present, it's composed mostly of small-scale operators who sell breeding stock to people who sell to others who want to start a herd, and so on. If the first auction is



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**"... for anything that looks so much like a rabbit, it is very disappointing . . ."**

**CHINCHILLAS** starts on p. 154

successful, NCBA thinks that the big fur breeders will get into the field.

• **Into Captivity**—Chinchilla, which has long been considered the great luxury fur, attained its popularity peak back in the Gay Nineties. Its popularity, however, almost trapped the animal out of existence. By 1918, South American stocks were so low that governments cracked down on the exporting of the animal.

About the same time, Mathias F. Chapman, a U.S. mining engineer working in Chile, began to experiment with raising chinchillas in captivity. Convinced that it could be done, he devoted nearly three years to trapping enough live animals to start a domestic herd. He finally acquired 23 mature chinchillas. Eleven of them survived the trip to San Pedro, Calif.

Today, the total U.S. herd numbers about 500,000, largely descended from Chapman's original 11. The number of breeders in the U.S. and Canada is estimated at 20,000. Largest concentration is in southern California; the second largest group is around Salt Lake City. Reginald Chapman, son of Mathias, runs one of the largest operations—2,000 chinchillas at his Inglewood (Calif.) farm, and another 1,200 on his farm at Big Bear Lake, Calif.

• **Kinsey Be Darned**—The reason that chinchilla fur has been so long in reaching the market is that nearly all the domestic chinchillas are descended from the ones Chapman brought up from South America 29 years ago.

You might think that after this much time to multiply there would be a bounty on chinchilla pelts. But for anything that looks so much like a rabbit, the chinchilla is very disappointing. In the first place, the small rodent is strictly monogamous. Once a pair has mated, it's for keeps, and philandering is taboo. Then, too, the gestation period of 111 days—the same as a lion—produces an average of only two young. Another handicap to the new industry is the fact that chinchillas don't breed at any particular time, like minks.

• **Small Upkeep**—Since Chapman introduced them into the U.S., chinchilla breeding has become a profitable business for many people. Up until the late 1930s, a "reasonable" price for a pair of breeders was \$3,200. During World War II, the price dipped, then was established at an average of from \$1,200 to \$1,500 a pair. A male may sell for as high as \$2,500.

Once you've hurdled the purchase





# **T**o the Employee Relations Director of every American company

**LET'S FACE IT . . .** the threat of war and the atom bomb has become a real part of our life—and will be with us for years. Fires, tornadoes and other disasters, too, may strike without warning.

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When the emergency comes, everybody's going to need help at the same time. It may be hours before outside aid reaches you. The best chance of survival for your workers—and the fastest way to get back into production—is to know what to do and be ready to do it. To be unprepared is to gamble with human lives. Disaster may happen **TOMORROW**. Insist that these simple precautions are taken **TODAY**:

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☐ **Check contents** and locations of first-aid kits. Be sure they're adequate and up to date. Here again, your CD Director can help—with advice on supplies needed for injuries due to blast, radiation, etc.

☐ **Encourage personnel** to attend Red Cross First Aid Training Courses.

☐ **Encourage your staff** and your community to have their homes prepared. Run ads in your plant paper, in local newspapers, over TV and radio, on bulletin boards. Your CD Director can show you ads that you can sponsor locally. Set the standard of preparedness in your plant city. There's no better way of building prestige and good employee relations—and no greater way of helping America.

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**"... there are only about  
six high-quality coats at  
large today..."**

**CHINCHILLAS** starts on p. 154

price, however, chinchillas aren't expensive to raise. You can keep them in a cage in the basement—provided you keep the temperature and humidity right. They're herbivorous, eat not more than \$4 worth a year.

• **Soft and Light**—According to NCBA, chinchilla is the only precious fur of gray color. The general appearance runs from pearl gray to gray blue. But there are three distinct colors in the inch-high fur shaft—deep blue underfur, sharp white bar, and black tip. At shows, chinchillas compete in five color classifications: pale, pale medium, medium, medium dark, and dark.

The fur is noted chiefly for its lightness and softness. Each pelt measures 7 in. by 12 in., weighs half-an-ounce. The softness comes from the extreme density of the fur—each follicle has from 40 to 80 hairs. In fact, the fur is so thick that only a down-and-out vermin would tackle it.

• **Pedigree**—Before a chinchilla is ready to take its place on the back of a well-dressed woman, it has to go through a sort of conditioning process. Every animal is registered in an open registry recognized by the Dept. of Agriculture. Complete records are kept, and each chinchilla is identified by two tattoo marks in its ear.

Also, the chinchilla is graded for fur and health on a system as complicated as an income tax form. Only animals that measure at least 85% perfection are sold for breeding.

• **Answering a Need**—In the past, chinchilla coats have sold as high as \$80,000. Today, the industry is coy about making a guess, prefers to wait for public reaction. "However," says Calvin L. Skinner, executive secretary of NCBA, "there's been a desperate need for a new luxury fur. And we feel we can live side by side with mink and other furs in a big market."

According to the industry, there are only about six high-quality chinchilla coats at large in America today. Some of the owners: Mary Pickford, Lily Pons, and Rita Hayworth.

• **Bargain**—Skinner thinks that the day is coming when chinchilla garments will be among the most sought-after luxury furs on the market. One of the talking points of breeders is the durability of the fur. A wear-and-tear machine has demonstrated that a chinchilla coat is good for 50 to 60 years. "But," one would-be customer complained, "it would take me at least that long to pay for it."



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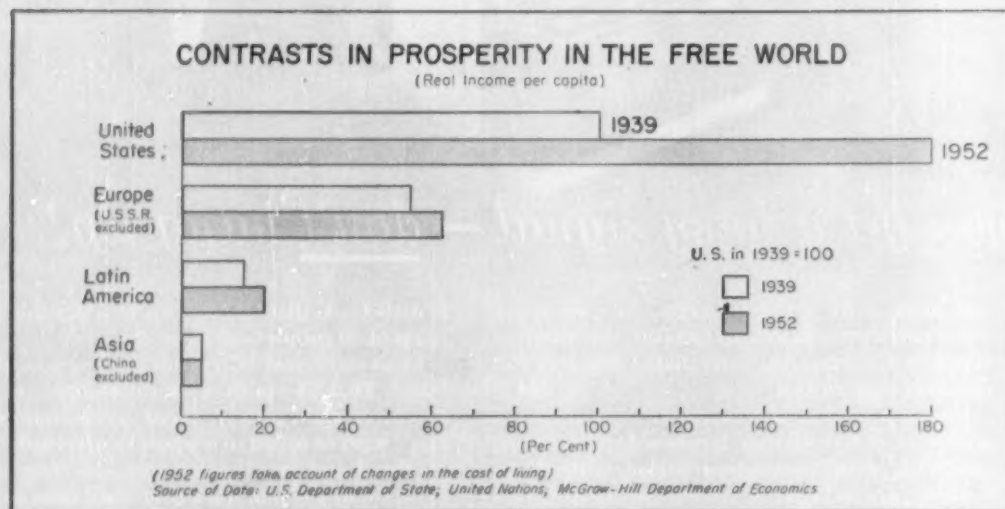
# Contrasts in Prosperity Endanger the Free World

The chart in the middle of this page summarizes a situation of profound importance to every American. It shows that:

1. On the average, Americans are vastly better off economically than most other people in the free world, and
2. In recent years the gap in income between the average American and the average European, Latin American or Asian has greatly widened.

## A Mounting Contrast

Even greater is the contrast between the real incomes of Asians and Americans. Today most Asians are no better off economically than they were back in 1939. On the other hand, the real income of the average American has almost doubled. As a result, the real income of the average Asian—always small by our standards—is now only a tiny fraction of that of Americans.



The chart shows that, at the outbreak of World War II, the real income (that is, actual purchasing power of income) of the average American was substantially higher than the average European's and much higher than the average Latin American's or Asian's. Since then, the European and Latin American have become better off. But the improvement in the economic lot of the average American has been so great that the others have been left far, far behind.

It must be remembered that the figures used to construct the chart are of varying quality. The fact is that few of the poorer countries have reliable statistics. However, it is generally agreed among competent observers, that the figures here presented offer a correct impression of the wide disparity in the average of real incomes between various parts of the free world. The figures, of course, have nothing decisive to say about spiritual and cultural values. In these, coun-

tries with relatively little material prosperity may be rich.

It is possible to draw a variety of morals from the story of lagging growth of income in other parts of the world. For one thing, it reflects the dynamic force of private enterprise. Private enterprise is characteristic of our economy far more than it is of most of the other free economies. The chart also reflects the fact that we are bountifully blessed with the natural resources essential to a high level of real income. Moreover, we did not suffer from the devastation and waste of two world wars as did many of the other free nations.

### Narrowing the Gap

But perhaps the most important message which the chart conveys is one of warning. It warns that something must be done to narrow the gap in prosperity between America and other parts of the free world, if that world is to be united successfully in the struggle against totalitarian Communism. Writing in the *HARVARD BUSINESS REVIEW*, Kenneth E. Boulding recently put it this way:

*"The crux of the problem is how to raise the three-quarters of the world that live on a low level to the high level of the other quarter, for it is precisely this wide disparity that makes our world so unstable. American-Russian relations, for instance [are] . . . complicated almost unbearably by the fact that each power is competing for the support of the vast fringe of underdeveloped countries . . . These countries are dissatisfied with their present state and are hovering between the two cultures, wondering which offers them the best chance of shifting from their present low-level to a high-level economy."*

Very real danger threatens from any feeling which may develop in the less fortunate free nations that our enviable economic progress has been made at their expense. Instead of viewing the American economic system as a model that might be followed by their own countries, they may be led to see in it a menace to their well-being. If Communist propaganda can persuade these people that their alliance with the free world will only result in their dropping farther and farther behind an increasingly prosperous United States, they will be driven to the side of totalitarianism.

### Test of Effective Leadership

How can these free nations on the lower half of the income ladder be helped to alleviate the conditions that keep them there? Surely this question poses a whole series of complicated problems. Yet, if we do not exercise some

effective leadership toward their solution, we can be sure that Russia will take advantage of the situation. In these circumstances, it is essential to both the stability and security of the free world that we help our less prosperous neighbors make satisfactory headway.

This does not mean that the United States should sacrifice its own economic progress in favor of some sort of global leveling scheme. On the contrary, a continually expanding and stronger economy is essential if we are to provide any real aid to our friends. Also, it goes without saying that our friends must be disposed to do all they can to improve their own economic position, if our cooperation to that end is to be effective.

### Great Skill Required

Our part in a program to achieve this goal calls for a high degree of skill and statecraft. It involves international trade policy, which, in itself, presents a perplexing range of problems. It involves also programs of foreign technical and economic assistance. And expanded foreign investment must play a key role in a balanced program to strengthen the economies of the free world for our common good.

The Commission on Foreign Economic Policy, headed by Clarence Randall, has recently submitted a report, embodying the results of a monumental inquiry into our foreign economic relations and measures to improve them. From the very nature of the subject, discussion of the report is bound to be attended by much controversy and conflict. However, an awareness of the facts presented by this chart should inspire us to accord to the problems posed by the Randall Commission the careful and sober consideration they must have if any real progress is to be made in raising the general standards of human well-being throughout the free world. Our willingness and ability to do this have now become the real test of our statesmanship, both at home and abroad.

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### EXECUTIVE PROBLEMS?

If your organization is in need of men at the executive level try contacting them through an inexpensive but effective advertisement in BUSINESS WEEK'S own classified advertising section. . . . "clues".

## Price Floor Under Natural Gas

Pressure is growing among producers for state-set minimum field rates. Utilities and pipelines, which have the most to lose, will be strongest opponents.

Few industries have equaled the spectacular growth and progress of the natural gas industry (BW—Sep. 26 '53, p85). More than three and a half times as much natural gas is being used now as in 1940; just between the years 1950 and 1953, use went up almost 40%. And with the growth in use, natural gas has changed in character from being a nearly worthless byproduct of oil production to being a very valuable commodity in its own right.

Prices at the wellhead, however, often lag far behind in showing this increased value. Gas is sold on the basis of long-term contracts. Some recent contracts have been made at 16¢ to 20¢ per mcf. (thousand cubic feet). But a good deal of the gas being sold now is on the basis of contracts made a long time ago. Some of these contracts have since been renegotiated, but there are many cases in which gas is still selling at less than 3¢ per mcf.

• **The Big Issue**—All this has led to pressure for state-set minimum field prices for gas. Many of the producers and royalty holders who see gas from a neighboring well in the same field selling at three and four times what they are getting for their own production are spearheading the campaign for minimum prices. They are joined by the conservationists—those who feel that gas is a valuable natural resource and that a good price is the best way to avoid its waste.

Kansas and Oklahoma already have minimum prices. The Oklahoma minimum is 9.8¢ per mcf.; the Kansas minimum was recently raised from 8¢ to 11¢. And all signs point to a renewed campaign in the Texas legislature this year to set minimum prices in Texas as well. But Texas is by no means solidly behind the idea and, as before, the campaign will find the going tough.

• **Opposition**—Pipelines, which gather the gas and transport it over long distances, are against the idea; they point out that minimum prices would mean higher gas costs to consumers in 38 states. And although their own rates, and therefore profits, are set by the Federal Power Commission on a cost-plus basis, they have been consistently caught in the squeeze between rising prices at the wellhead, and the slow machinery of getting a rate increase O.K.'d by FPC.

Electric utilities—which use the gas for generating—and large industrial customers in Texas are also against mini-

mum prices—for the obvious reason that their costs would go up. And finally, the oilmen, including both major companies and independents, who produce a very large part of the gas sold, are, on the whole, opposed to the idea. Government price regulation of any kind is anathema to them, and they have no desire to set precedents for this kind of regulation, even with minimum prices.

• **Texas Divided**—If Texas does get minimum prices, this year or next, chances are they won't be statewide, but will apply just to the Panhandle and Hugoton fields. The huge Hugoton field extends from the upper part of the Texas Panhandle through a strip of Oklahoma, into Kansas. Sharply higher gas prices, and property values, from the same field but just across the state line into Oklahoma, point the problem up sharply. And pipelines have been charged with drawing more heavily from the lower-priced gas wells in Texas than from the higher-priced wells in Oklahoma and Kansas, although all wells tap the same reservoir.

The Texas legislature has a powerful incentive to fix minimum field prices for gas—and that's in the problem of state revenues. Early this month the Supreme Court invalidated Texas' "gas gathering" tax (BW—Feb. 13 '54, p33)—and the state lost some \$14-million a year in revenues. Gov. Allan Shivers will call a special session of the legislature around mid-March to consider ways to make up the money.

Texas now taxes gas producers 5.72% of the market value of gas at the well. One proposal that will be put before the legislature is to raise this tax to a flat 1.5¢ per mcf. of gas produced, with a provision that the tax would be paid by the purchaser if the price of the gas is under 10¢ per mcf. An alternative proposal is to set a statewide 10¢ minimum gas price; by increasing gas values this would boost the tax take approximately \$6-million to \$8-million a year, even at the current rate of 5.72%.

• **In the Courts**—One legal case that has become a cause celebre to the natural gas industry will have a direct bearing on the fate of minimum field prices in Texas. This is the Phillips Petroleum case (BW—Dec. 12 '53, p132), which the Supreme Court at first refused to hear, and then, in a sharp about-face, decided to hear. The issue in the Phillips case is whether or not



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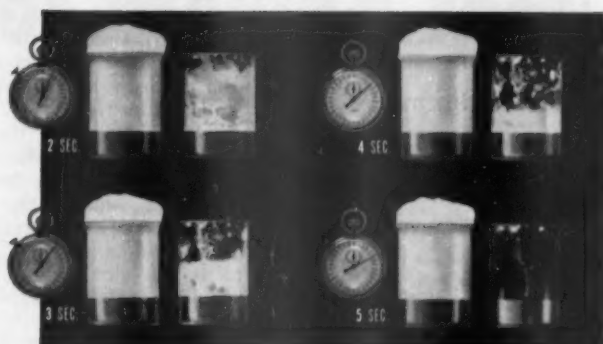


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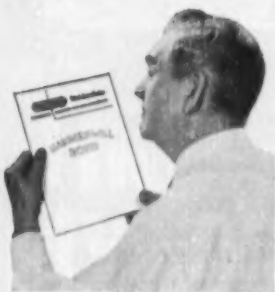
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FPC has the authority to fix prices for natural gas producers who do not themselves transport the gas but sell to interstate pipelines that do.

If the Supreme Court should find that FPC does have the power to regulate producers' prices, then oil company opposition to the idea of state fixing of minimum prices can be expected to soften considerably. But such a finding would raise all sorts of jurisdictional problems. The court itself, in 1950, upheld the states' right to set minimum field prices. Suppose the state authority in Kansas or Oklahoma (or possibly Texas) set a minimum of 14¢ per mcf. Could FPC set a price for an individual producer that was under 14¢?

• **Pipelines Protest**—Still another case, this time concerning the pipelines rather than the producers, has a bearing on the question of minimum field prices for gas.

A long-standing complaint of pipeline companies is that FPC policy in setting rates discourages them from owning their own producing wells. As a rule, pipelines buy most of the gas they transport, and FPC, in figuring their cost base for rate-making purposes, allows the full cost of the gas they've bought. But when a pipeline gets gas from its own well, FPC sets the value of that gas in figuring the cost base—and pipelines are unanimous in calling these values "ridiculously low."

For rate-making purposes, pipelines would like to use state minimum field prices as their cost on gas they produce from their own wells. In applying to FPC for a rate boost, Northern Natural Gas Co. submitted 8¢ per mcf. (the Kansas minimum at that time) as its cost of gas from its own wells in Kansas. FPC refused to allow this, instead granting Northern Natural a rate increase based on 5¢ per mcf. (the company's actual cost of production) for the gas from its own wells, and whatever higher prices the company had actually paid other producers for their gas.

Northern Natural and the State Corporation Commission of Kansas (the Kansas authority that set the minimum) took the issue to the courts. Basically, this is the same jurisdictional dispute that would arise if FPC should come to regulate all producers, instead of just pipelines who also happen to be producers.

The question is whether FPC, in regulating the industry, has to take state-set prices into account, or can ignore them.

The issue is still being tested in other cases before FPC. But the U. S. Circuit Court upheld FPC policy in the Northern Natural case, and last month the Supreme Court, by refusing to review the case, in effect upheld the lower court decision.



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## COMMODITIES BRIEFS

Green coffee prices are acting as if they didn't know they're being investigated. They keep spiraling upward to new highs. Meanwhile, leading chain stores are raising the prices of their private brands of roasted coffee—narrowing the gap between these and the vacuum packed brands.

Cotton textile markets seem to be picking up somewhat. Yarn prices are generally firmer, and order backlogs are up. At the same time prices for the key 80-square print cloth (new series, Figures of the Week, page 21) are up somewhat from yearend, though still a good deal below their level a year ago.

Office for Defense Mobilization has announced its first goal for titanium smelting capacity—37,500 tons by 1956. Current smelting capacity is 7,680 tons a year; projects already in the planning stage will bring this to 11,880 tons by 1956.

Steel scrap prices are still falling sharply. Iron Age magazine's composite price is down to \$25.33 a ton, a drop of nearly \$20 a ton from the peak last July. Scrap prices have been traditionally considered a bellwether for steel business; steel men now are crossing fingers and toes, hoping that this won't be true again.

Gasoline stocks have hit a new peak each week for five straight weeks, and are now 14% higher than a year ago. Still, gasoline production continues at near record levels. Refiners have already cut wholesale gasoline prices, and many observers feel that basic crude oil prices will be threatened if this keeps up much longer.

U.S. rubber manufacturers will sit down with representatives of the natural rubber producing countries to discuss quality requirements for the American market. The meeting, first of its kind, will take place in Singapore in April. American manufacturers feel that natural rubber quality, which slipped badly during the war years, is still below par.

Zinc producers' stocks jumped another 18,000 tons in January, bringing the total to almost 200,000 tons. A number of producers have announced cutbacks, but many observers question whether these are sharp enough to halt the rise in stocks. It's a good bet that the Tariff Commission will recommend hikes in zinc (and lead) tariffs when it reports on the metals to Congress late next month.

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## Striking a Balance

President Eisenhower has said that the government will be quick to act if unemployment fails to shrink next month. He hinted at further tax relief to boost consumer spending power.

The President's pledge was widely interpreted as an answer to his political critics who have said his tax recommendations favored "big business" at the expense of the consumer, the "little man." And it is true that the President's recommendations call for relieving business of many tax restrictions (BW—Feb. 13 '54, p. 136). But anything more than a superficial reading shows that the consumer is by no means left out.

This attitude sharply differs from the policies and practices of recent Democratic administrations, which were wedded to a philosophy that favored increased government intervention only to spur consumer buying power. The New and Fair Deals were motivated in part by a desire to correct the thinking of an earlier period, which saw production as the sole key to progress. Moreover, there can be no denying that the Democrats brought about a massive redistribution in income, which helped create the mass consumer market.

But it is also true that, while the consumer benefited, business was penalized. As a result, the policy failed during the years of the Great Depression to provide any great expansion in production. In fact, the onerous restrictions placed on business investment drove us to using inflationary measures during wartime. And the restrictions not only discouraged investment, but also led to evasion and inefficiency on a big scale.

By recommending faster depreciation allowances and relief from double taxation of dividends, the new program does offer incentives to business. These steps seem necessary to redress the balance.

Taken as a whole, the Eisenhower proposals seem designed to increase the spending power of both business and consumers. The Administration has already eliminated EPT and has reduced individual income taxes. The proposals now before Congress follow the same pattern. Some of them may be criticized, but it is hard to quarrel with their underlying philosophy that consumer and business spending are interrelated.

The Administration's proposals are based on the assumption that a growing economy and a rising standard of living go hand in hand. This is a concept we support. It should be given a chance to work.

## Jobs—and Tariffs

Howard S. Piquet, a specialist in the Library of Congress, made a striking point for freer trade last week with a calmly calculated conclusion that eliminating all U.S. tariffs would not affect more than 200,000 American workers.

Piquet, who is a ranking authority on international trade, was not advocating the elimination of all tariffs.

Rather he was intent on showing that the U.S., by virtue of its overwhelming economic strength, can materially affect the economies of our allies without feeling much stress ourselves. For example, he pointed out that if trade between the U.S. and France were doubled, the impact on the French economy would be about 10 times as great as on ours.

These calculations support the Randall Commission's recommendation that planned reductions in tariffs can be made. No one is calling for a complete elimination of tariffs, especially in this period of business decline. But it is clear that some reductions will be of great help abroad—and will do little harm at home.

## You Takes Your Chance

Economists like to think of themselves as scientists, yet the language they use is anything but scientific. Take, for instance, the terms economists use to describe the state of business now. Some say we are having a recession, others a readjustment. This is only a beginning. Any number of variations are being bandied about: orthodox recession, recession de luxe, rolling readjustment, dynamic doldrums, dispersed reversal.

Unlike the ancient Greeks, economists have too many words for it. Of course, it is not difficult to distinguish between some terms. For example, a recession is less drastic than a depression. In fact, the term recession first achieved prominence in 1937, when economists needed a phrase to differentiate what was happening then from the depression of the early 1930s. But there are some economists who see any sizable drop as a depression. Others feel that only a total catastrophe such as we once experienced deserves that dubious distinction.

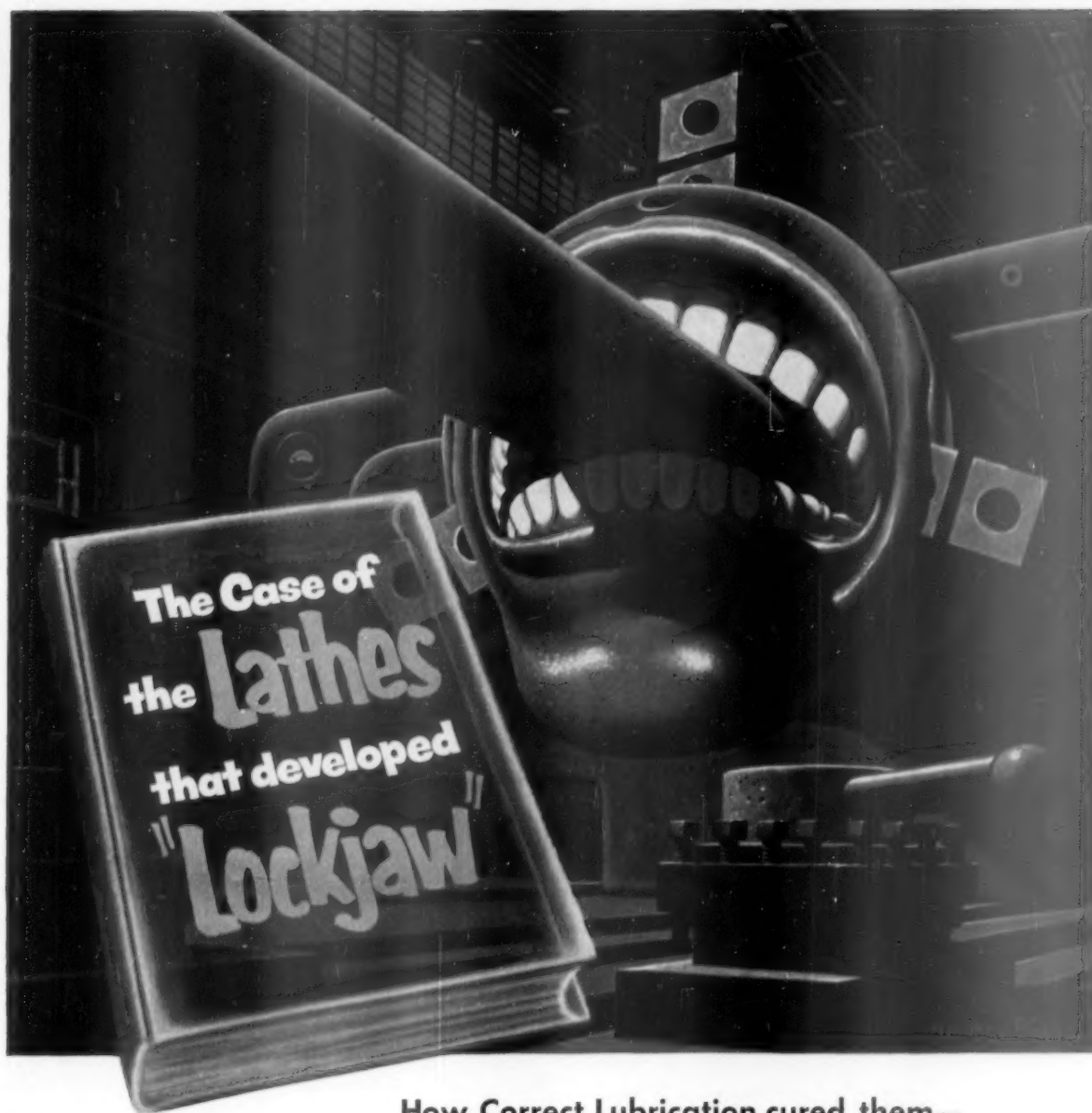
If, say, we arbitrarily agree that a recession occurs when gross national product falls 10-to-12%, does a drop of 9.9% represent merely a readjustment and a drop of 12.1% a depression? Where does a rolling readjustment fit in, or an orthodox recession? Have there been nonrolling readjustments and unorthodox recessions? What disperses in a reversal? When do doldrums become dynamic?

We can't answer these questions. For it is not only a matter of the term but who is using it and in what tone of voice.

A worker who has been laid off or a businessman forced to close his plant is in a "depression." Optimists like "readjustment," which rolls lightly on the tongue and is easier on the mind than "recession." As for the pessimists, there are all degrees from "orthodox recessions" to "near-depressions."

We prefer not to take sides, but, paraphrasing Shakespeare, we do know that a decline by any other name is still a decline. Moreover, we're confident that before long, we'll enjoy another period of expansion. After that, there may be another decline. Though economics may be more precise by then, we are willing to bet that, human nature being what it is, the economists will have new terms—but they'll still be fuzzy.





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